

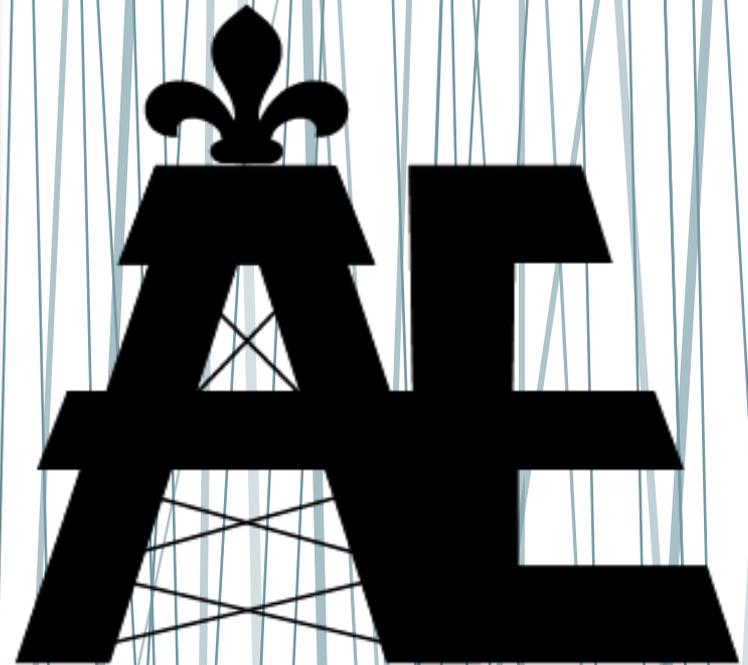
# Tuscaloosa Marine Shale Wealth Management Seminar

Online Resources & Monetizing Minerals

September 26, 2014

Summit, Mississippi

By: Benjamin J. Waring, J.D., CPL



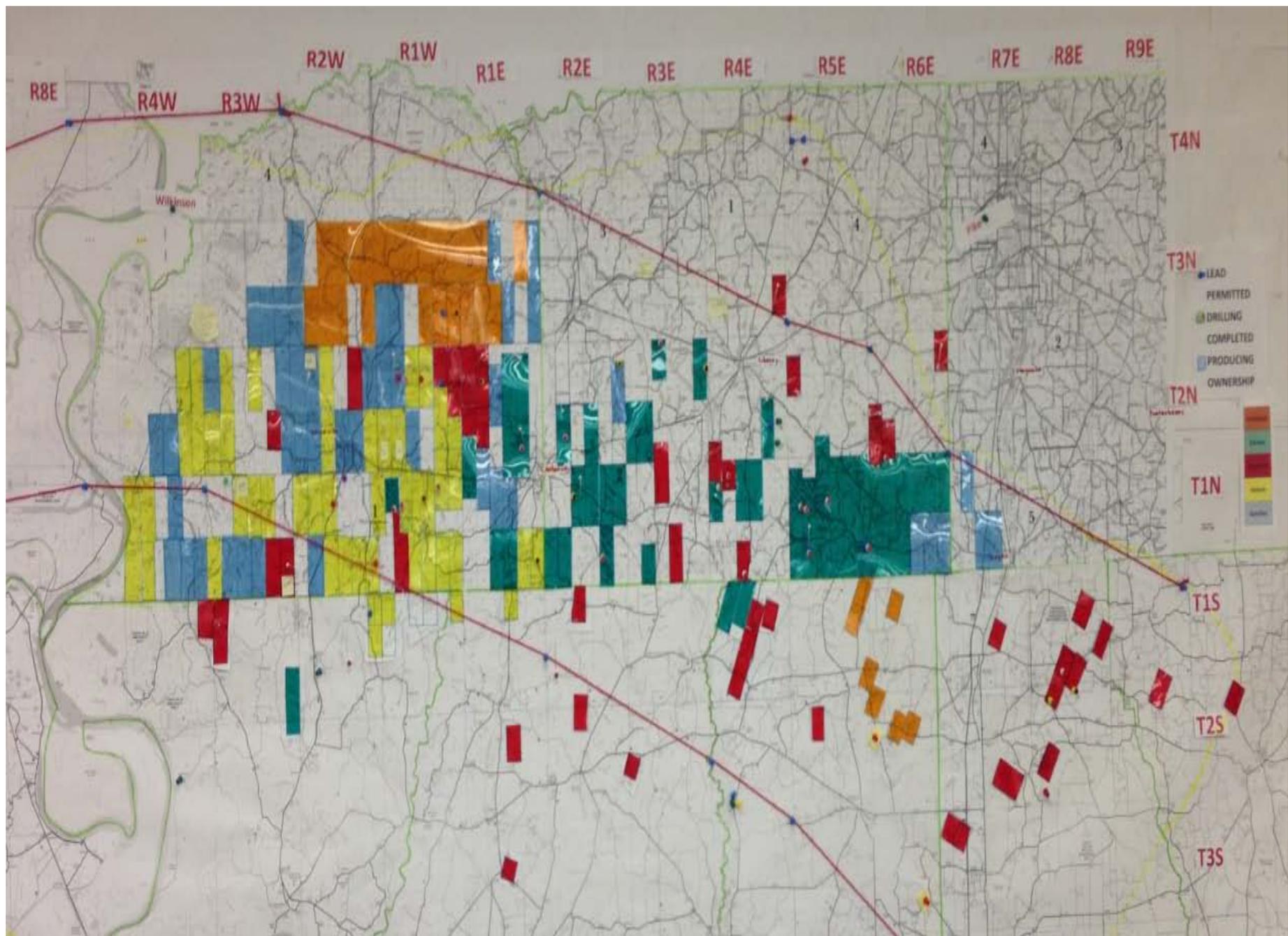
**ARPENT ENERGY**  
New Orleans, LA

# Arpent Energy, LLC and Other Efforts

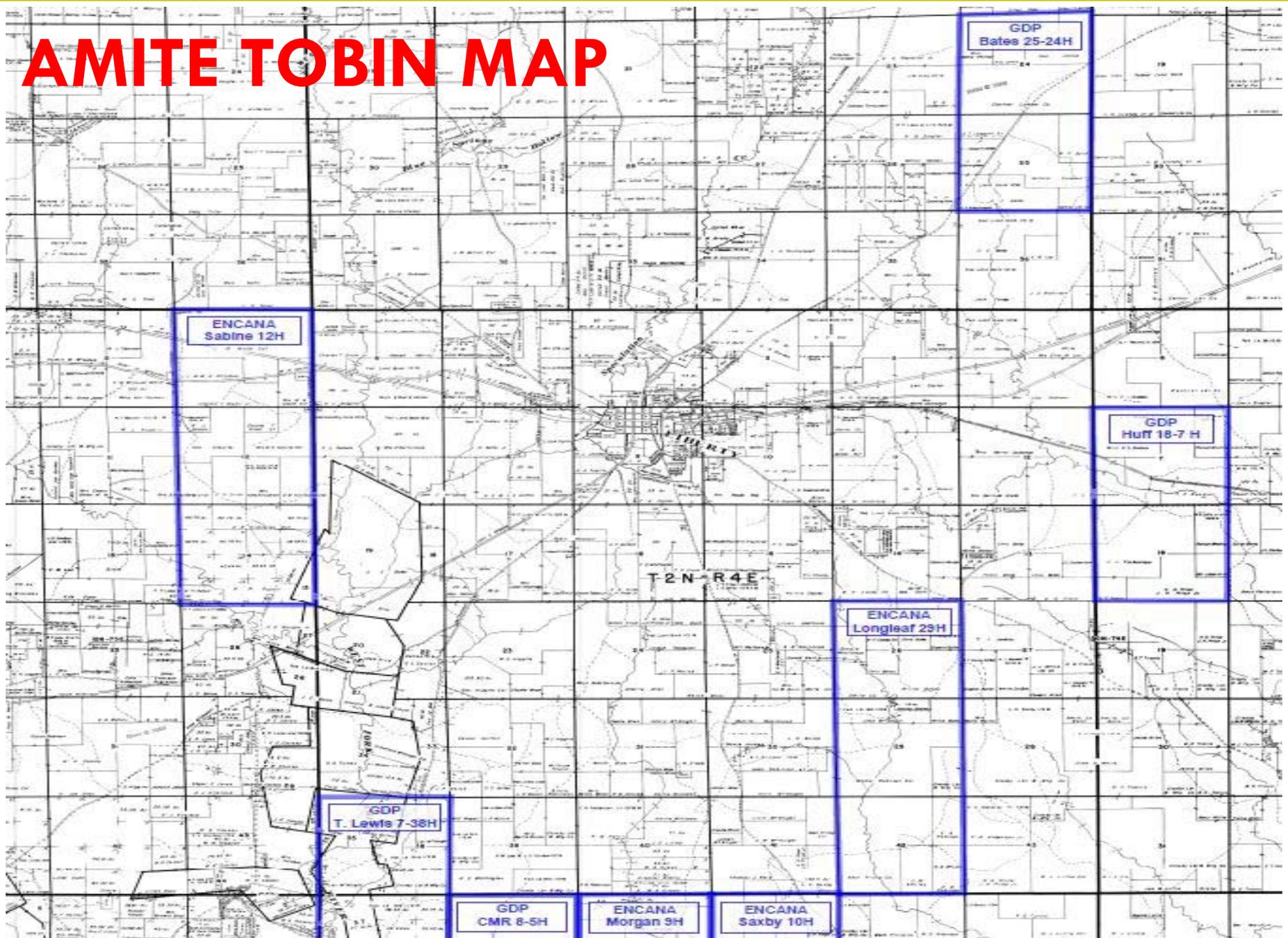
## Who We Are and What We Do



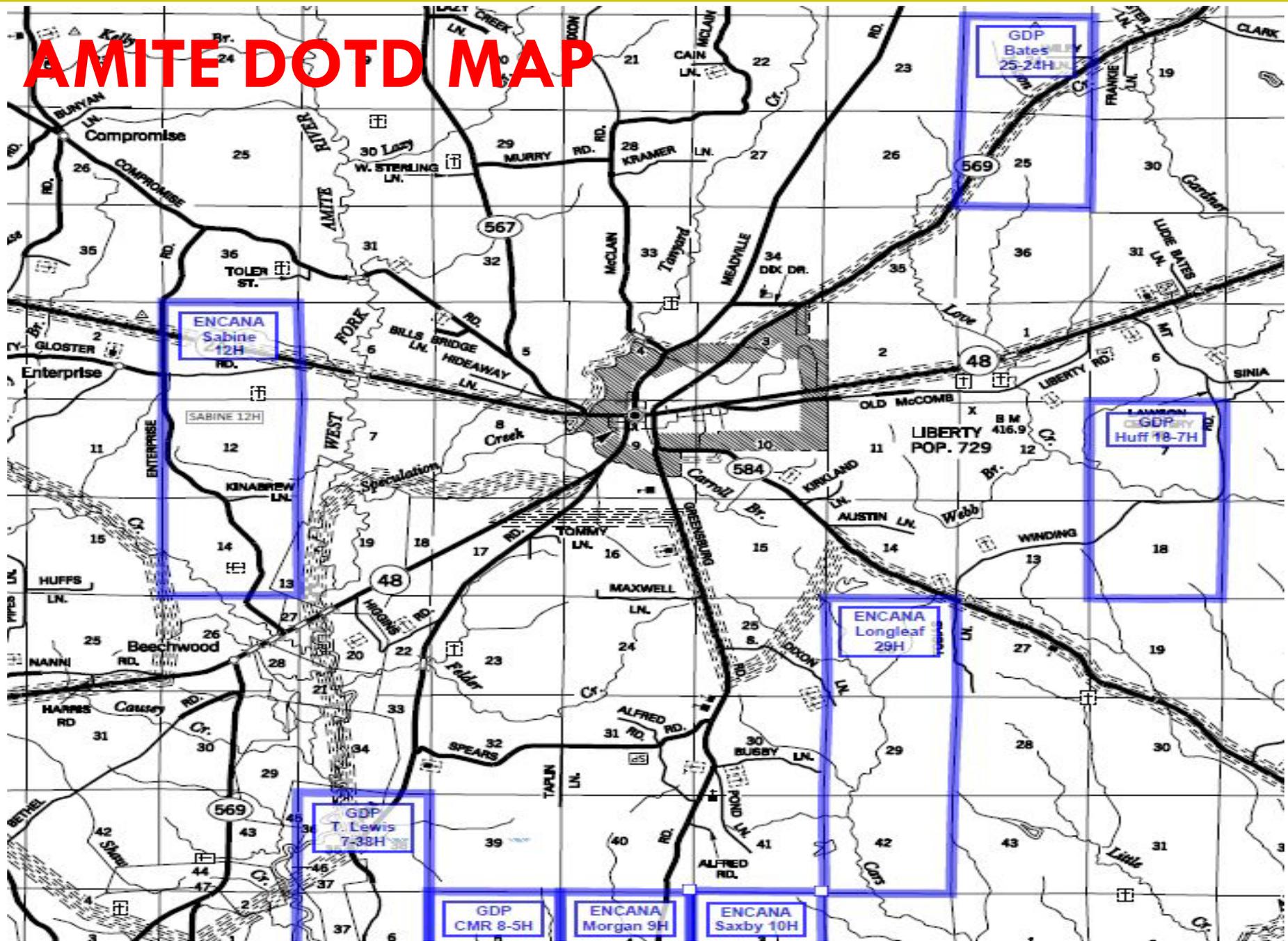
- *Landmen and Attorneys in NOLA since 1980* –Staff of 10 plus consultants - Land/Legal Consulting Service
- *Mineral/Royalty Acquisition Fund* – Haynesville Shale, Deep Tuscaloosa Trend, Tuscaloosa Marine Shale
- *Mineral Owner Representation* – Louisiana and Mississippi – handling all interface with the operator – Fees are commission based on monetized value of leasing and royalty
- *Website Maintenance and Data Provision for the OCS of the GOM* – [www.ocsbbs.com](http://www.ocsbbs.com)
- *New [www.TMSHorizons.com](http://www.TMSHorizons.com) Minerals Marketplace* – serving customers of the TMSHorizons Website



# AMITE TOBIN MAP



# AMITE DOTD MAP



# Helpful Links & Websites



- Ameila Resources- [www.ameliareources.com](http://www.ameliareources.com)
- LDNR – Sonris - Data Access Page- [www.sonris.com](http://www.sonris.com)
- MSOGB Home Page- <http://www.ogb.state.ms.us/default.htm>
- MSOGB Mapping Website- <http://gis.ogb.state.ms.us/MSOGBOnline/>
- MSOGB page - TMS Development Page- <http://www.ogb.state.ms.us/TMSDevelopment.html>
- Go Haynesville Shale Home Page- [www.gohaynesvilleshale.com](http://www.gohaynesvilleshale.com)
- Goodrich Petroleum Corporation–Management Presentation- <http://www.goodrichpetroleum.com/presentations/MgmtCurrent.pdf>
- Encana Resources-Investor Presentations- <http://www.encana.com/pdf/investors/presentations-events/corporate-presentation.pdf>
- Halcon Resources- Investor Presentations- [http://files.shareholder.com/downloads/ABEA-5X1N65/3235854946x0x779046/5d4253d0-351a-4926-9895-8beeaaf2b62c/Halcon IR%20Presentation Barclays vFINAL.pdf](http://files.shareholder.com/downloads/ABEA-5X1N65/3235854946x0x779046/5d4253d0-351a-4926-9895-8beeaaf2b62c/Halcon_IR%20Presentation_Barclays_vFINAL.pdf)
- Comstock Resources- Investor Presentations- <http://phx.corporate-ir.net/phoenix.zhtml?c=101568&p=irol-presentations>
- Sanchez Energy Corporation- Investor Presentations- <http://investor.sanchezenergycorp.com/phoenix.zhtml?c=248475&p=irol-presentations>
- Amite TMS Facebook Page- <https://www.facebook.com/AmiteTMS>
- TMS Horizons Home Page- <http://tmshorizons.com/>
- TMS Horizons Minerals Page- <http://tmshorizons.com/index.php/mineralsroyalty-info/>
- Arpent Energy, LLC- [www.arpentenergy.com](http://www.arpentenergy.com)

# Amelia Resources Home Page

## www.ameliareources.com

[home](#)[management](#)[tuscaloosa trend](#)[presentations](#)[drilling prospects for sale](#)[investments](#)[news](#)[contact us](#)

### ABOUT AMELIA RESOURCES

Amelia Resources LLC is a privately-held exploration and production company. The company generates drilling projects across the onshore Gulf Coast of the U.S. The company was founded in 2003 by Kirk Barrell and has offices in The Woodlands, Texas. It holds a private equity interest and serves as management in [Wave Exploration LLC](#)

Amelia is actively engaged in several conventional and unconventional projects. The company leverages its 27 years of geological and geophysical experience in areas to obtain strategic positions in drilling projects.



# Louisiana Department of Natural Resources - Sonris



<http://dnr.louisiana.gov/>

DEPARTMENT OF NATURAL RESOURCES  
STATE OF LOUISIANA

Oil & Gas Energy Mineral Resources Conservation Coastal Management

Louisiana.gov | Department of Natural Resources

**SONRIS**  
Database Access  
Document Imaging  
GIS Imaging

ACCESS ONE DATE

INFORMATION PORTALS  
for Visitors  
for Students & Researchers  
for Employees

FEATURED SERVICES  
Reservoir Services and Studies  
Fishing Members  
Keyhole Camera Incident  
Keyhole Data  
Aquatic Water Resource  
Programs  
Surface Water Program  
WMS, GIS, Maps - Contacts  
State Energy Data & Analysis  
Get a State Map

Notice of Publication  
State Mineral Lease Sale

Coastal Protection and  
Restoration Authority  
of Louisiana

FIGHT  
FRAUD,  
WASTE  
& ABUSE!

CONTACT  
A  
LTA  
BENEFIT

Welcome to the Department of Natural Resources

LATEST NEWS

September Mineral Lease Sale Results announced by Board

Proposed Statewide Order No. 23-0-14/15 Fee Schedule - state mineral and energy board hosts august lease sale - O&G awards energy improvement loan to Jefferson Parish for work at the Lake Catahoula Pumping Station - State Water Resources Commission reveals program improvements for Water Management - oil and energy board brings \$1.5 million with start of new FY 14/15 state - Energy efficient improvements at De La Salle School get green light from state Department of Natural Resources - Commissioner of Conservation Awards South Cadee Groundwater emergency order -

NEWS ARCHIVE

WORKING FOR LOUISIANA

Office of Conservation, Mineral Resources, and Coastal Management  
play an important role in regulating and protecting the natural resources of our state.

UPCOMING MEETINGS AND EVENTS

SEP 24 Oil and Gas Hearings

SEP 24 Proposed Statewide Order No. 23-0-14/15

SEP 24 Atchafalaya Basin Program - Research and Promotion Board Meeting

SEP 30 Oil and Gas Hearings

SEP 07 Oil and Gas Hearings

View All Meetings

Message from the secretary

Witness from DNR Secretary Stephen Chubb and the men and women of the Louisiana Department of Natural Resources who work every day to assure and promote sustainable and responsible use of the natural resources of our state so they are available for the enjoyment and benefit of our citizens now and in the future. Our goal is to provide a fair, predictable and effective regulatory system that allows responsible development and economic growth through the use of our natural resources while at the same time ensuring protection of public safety and the environment. That balance is the focus of our role as stewards of Louisiana's beautiful natural resources that are so critical to our economy and our culture.

Click here to open:  
[Sonris](#)  
Database Access  
Document Imaging  
GIS Imaging (Best if opened in Google Chrome)

Click here for a user friendly way to look up well data by Section, Township & Range

Louisiana.gov > Department of Natural Resources > SONRIS

DNR uses its Administrative Web Server as the electronic access portal to information about DNR stored in static pages on the Administrative Web Server, and to update SONRIS information available from other DNR Web servers. The public now has access via their Web browser to various tool sets within SONRIS:

|   |   |  |  |
|---|---|--|--|
| <b>GIS Access</b><br>Retrieve information using interactive, geographically oriented, map capabilities, and select from a variety of layers of backgrounds. | <b>Dashboard</b><br>Click here for oil & gas charts and more.   | <b>Data Access</b><br>Oil, Gas & Ground Water information and more at your finger tips.              | <b>Document Access</b><br>Millions of documents in various formats readily available for view and print.                       |
| <b>Online Well Log Submission</b><br>Submit your Well Log electronically. Click Here to view preliminary guidelines & training for submission.              | <b>Online Production Reporting</b><br>Report oil & gas online, refer to the User Guide for instructions   | <b>Online Royalty Reporting</b><br>Report mineral royalty online, refer to Tutorial for instructions | <b>Online UIC Reporting</b><br>Report UIC online   |
| <b>Online Surface Water</b><br>Apply and track surface water application online visit our Louisiana Surface Water Management Program                        | <b>Well Test/Inactive Reports Submission</b><br>Submit your Well Test/Inactive Report electronically. Click on User Guide for detail instructions | <b>UIC Online Data Entry Reports</b><br>Click here for UIC online data entry reports                 | <b>Well Test Online Data Entry Reports</b><br>Click here for Well Test online data entry reports                               |
| <b>Online ORI Submission</b><br>Submit your ORI application electronically.   | <b>Invoice Payments</b><br>Pay invoices online; invoice number and security code are needed   | <b>Tract Nominations</b><br>Click here for detailed instructions for online tract nomination         | <b>Legacy Lawsuits</b><br>Helpful reports for Legal cases. For use of Reports on Demand  |
| <b>Contact/Data Request/Help</b><br>Click here to contact us or submit a request for data   | <b>FAQ</b><br>Frequently Asked Questions and more....   | <b>Downloads</b><br>Click here to get required components  | <b>Disaster Preparation Reports:</b><br>Helpful reports for hurricane season. For use of Reports on Demand, view the tutorial. |

These servers provide this service to the public via dynamic pages generated on a number of Web Servers. For more information on how these Web servers fit into DNR's computing architecture and future direction, you are invited to review the project overview for the Strategic Online Natural Resources Information System [Here](#).

*Disclaimer*

The information on this Web site has been carefully prepared from the best available sources of data. It is intended for general informational purposes only and should not be considered authoritative for navigational, engineering, other site-specific uses, or any other uses. The Louisiana Department of Natural Resources (DNR) does not warrant or guarantee its accuracy, nor does DNR assume any responsibility or liability for any reliance thereon.

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[Recent additions/revisions to ROD reports](#)

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Haynesville Shale Information

Injection Information

Inspection and Enforcement

Production And Reserve Pits

Production Facilities

Production Information

Transportation Information

Tuscalousa Marine Shale Information

Well Information

**Section, Township, Range Search**

Click here for optional ways to search the database for Well Information

### Mineral Resources

Codes/Lookups

Lease Related Info

### Secretary

General

HERO Application Status

Non-HERO Applications

|   |          |      |        |     |  |
|---|----------|------|--------|-----|--|
| Wells By Field By Operator                  | Standard |      |        |     |  |
| Wells By Field ID                           |          | Lite |        |     |  |
| Wells By Lambert Coordinates                | Standard | Lite |        |     |  |
| Wells By Lambert Coordinates - Tabular      |          | Lite |        |     |  |
| Wells By LUW                                | Standard | Lite |        |     |  |
| Wells By Name                               |          |      |        | ROD |  |
| Wells By Operator By Field                  | Standard |      |        |     |  |
| Wells By Operator Code                      |          |      |        | ROD |  |
| Wells By Organization Name                  |          | Lite |        |     |  |
| Wells By Parish                             |          | Lite | Report | ROD |  |
| Wells By Parish STR                         |          |      |        | ROD |  |
| Wells By Parish By Depth                    |          |      |        | ROD |  |
| Wells By Parish By Effective Date           |          |      |        | ROD |  |
| Wells By Parish With Sands                  |          |      |        | ROD |  |
| Wells by Parish with Permit Date Range      |          |      |        | ROD |  |
| Wells By Section, Township And Range        | Standard | Lite |        | ROD |  |
| Wells By Section, Township, Range By Parish |          | Lite |        |     |  |
| Wells By Serial Number                      |          | Lite |        |     |  |
| Wells By Specific Field / Operator          |          | Lite |        |     |  |
| Wells By Spud Date                          |          |      |        | ROD |  |
| Wells By Spud Date Range                    |          |      |        | ROD |  |
| Wells By Status                             |          |      |        | ROD |  |
| Wells Initial Test Oil Potential            |          |      |        | ROD |  |
| Wells Permitted By Parish                   |          |      |        | ROD |  |

One of the simplest ways to look up Well Information is by Section, Township & Range (STR). Click on **Lite** format. Your STR can usually be found on:

- Cash Sale Deed
- Tax Assessment
- Oil, Gas & Mineral Lease

# LDNR Office Of Conservation

## Wells by Section Township Range

Enter Section (XXX):

Township (XXX) :

Range (XXX):

Submit Query

Enter STR in this format  
Then Click  
**Submit Query**

\*NOTE - Use surface  
location section for search

# Wells by Section Township Range

| Section | Township               | Range                        |          |                      |                      |                    |            |            |             |           |          |          |                    |
|---------|------------------------|------------------------------|----------|----------------------|----------------------|--------------------|------------|------------|-------------|-----------|----------|----------|--------------------|
| 33      | 15                     | 8E                           |          |                      |                      |                    |            |            |             |           |          |          |                    |
| Count   | Well Serial            | Well Name                    | Well Num | Field ID             | Org ID               | Parish             | Upper Perf | Lower Perf | Total Depth | API Count | LUW Code | LUW Type | Well Status        |
| 1       | <a href="#">247207</a> | TMS RA<br>SUA;BLADES<br>33 H | 001      | <a href="#">6106</a> | <a href="#">G104</a> | <a href="#">53</a> | 12064      | 17009      | 17136       | 1         | 051489   | 2        | <a href="#">10</a> |



This example only shows one well from the STR query. Some queries will show multiple wells to choose from. You can view Well Information by clicking on the **Well Serial** number.

# Well Information

## Review Well Information Well Name

WELLS

| SERIAL     | WELL NAME              | WELL NUM   | ORG ID               | FIELD | PARISH | PROD TYPE | SEC | TWN | RGE | EFFECTIVE DATE | API NUM        |
|------------|------------------------|------------|----------------------|-------|--------|-----------|-----|-----|-----|----------------|----------------|
| 247207     | TMS RA SUA;BLADES 33 H | 001        | <a href="#">G104</a> | 6106  | 53     | 10        | 033 | 015 | 08E | 04/04/2014     | 17105200460000 |
| PRMT DATE  | SPUD DATE              | STAT DATE  | ST CD                |       |        |           |     |     |     |                |                |
| 11/05/2013 | 01/19/2014             | 04/04/2014 | 10                   |       |        |           |     |     |     |                |                |

WELL SURFACE COORDINATES

| Surface Longitude | Surface Latitude | Lambert X | Lambert Y | Ground Elevation | Zone | Datum  |
|-------------------|------------------|-----------|-----------|------------------|------|--------|
| 90-24-43          | 30-55-20         | 2288966   | 821468    | 323.5            | S    | NAD-27 |

WELL SURFACE COORDINATES GENERATED BY DNR

| UTMX 83         | UTMY 83          | LONGITUDE 83 | LATITUDE 83 |
|-----------------|------------------|--------------|-------------|
| 747305.56680457 | 3423887.29774446 | -90.41200096 | 30.922526   |

BOTTOM HOLE COORD

| EFFECTIVE DATE | END DATE   | PLUGBACK TOTAL DEPTH | TRUE VERTICAL DEPTH | MEASURED DEPTH | LAT DEG | LAT MIN | LAT SEC | LONG DEG | LONG MIN | LONG SEC | COORDINATE SOURCE  | LAMBERT X | LAMBERT Y | ZONE | COORDINATE SYSTEM  |
|----------------|------------|----------------------|---------------------|----------------|---------|---------|---------|----------|----------|----------|--------------------|-----------|-----------|------|--------------------|
| 04/04/2014     |            |                      | 11660               | 17136          | 30      | 56      | 18      | 90       | 24       | 13       | <a href="#">02</a> | 3572342   | 887995    | S    | <a href="#">02</a> |
| 11/05/2013     | 04/03/2014 |                      | 13230               | 19500          | 30      | 56      | 18      | 90       | 24       | 13       | <a href="#">02</a> | 2291545   | 827284    | S    | <a href="#">01</a> |
| 11/05/2013     | 04/03/2014 |                      | 13230               | 19500          | 30      | 56      | 18      | 90       | 24       | 13       | <a href="#">02</a> | 3572342   | 887995    | S    | <a href="#">02</a> |

WELL HISTORY

| SERIAL | WELL NAME              | WELL NUM | ORG ID | FIELD | ST CD | PT | WELL CLASS | EFF DATE   | END DATE   | STAT DATE  |
|--------|------------------------|----------|--------|-------|-------|----|------------|------------|------------|------------|
| 247207 | TMS RA SUA;BLADES 33 H | 001      | G104   | 6106  | 10    | 10 |            | 04/04/2014 |            | 04/04/2014 |
| 247207 | TMS RA SUA;BLADES 33 H | 001      | G104   | 6106  | 01    | 00 |            | 11/05/2013 | 04/03/2014 | 11/05/2013 |

SCOUT INFO

| REPORT DATE | WELL STATUS | MEASURED DEPTH | TRUE VERT DEPTH | DETAIL   |
|-------------|-------------|----------------|-----------------|--|
| 05/12/2014  | 10          | 17136          | 11660           | <u>COMPLETED 04/01/2014</u> AS AN OIL WELL IN THE TMS RA SUA SAND; PM F; 1250 BOPD; 115 MCFD; SITP 2487; CP 1800; 14/64" CHOKE; 600 BWPD; .2% B5&W; GOR 92; GVTY 36.4; PERFS 12064-17009'. ST: 10  |
| 03/03/2014  | 06          | 17136          |                 | SET 5 1/2" CSG T@ 17135' W/ 2155 SXS CMT ; WOCR  |
| 02/24/2014  | 05          | 16985          |                 | DRLD; TSTD BOPS 2/22/14  |
| 02/18/2014  | 05          | 11602          |                 | RAN 9 5/8" CSG TO 11400' W/ 1025 SXS CMT; TSTD BOPS 2/15/14  |
| 02/10/2014  | 05          | 11602          |                 | DRLG   |
| 02/03/2014  | 05          | 6247           |                 | RAN 13 5/8" CSG TO 4097' W/ 900 SXS CMT; N.U & TSTD BOPS 1/30/14; ANNULAR, 1, 13 5/8", 5000; RAM 3, 10,000; DRLG   |
| 01/27/2014  | 05          | 4097           |                 | DRLG; PREP TO RUN 13 5/8" CSG  |
| 01/21/2014  | 05          | 1172           |                 | DROVE 20" CP TO 116' W/ 90' PEN; SPUD 1/19/14; DRLG; 13 3/8" CSG TST RECD 1/31/14; 9 5/8" CSG TST RECD 2/17/14; INFO WH-1 & SCHEMATIC RECD 3/18/14; D5 (150-17136') RECD 3/18/14 FORM COMP, WH-1 & SCHEMATIC RECD 5/6/14; 9 5/8" CSGT RECD 5/27/14 |
| 11/05/2013  | 01          | 19500          |                 | S 01 D 30' 04" W - 19,577.01' FROM NGS MONU. "MAY" IN SEC 33. PBHL: N 23 D 54' 47" E - 6,361.83' FROM SURF LOC IN SEC 28.  |

Click link to see Operator

| Org ID | Name                       |
|--------|----------------------------|
| G104   | GOODRICH PETROLEUM COMPANY |

History of Status and Details from Permit 11/05/13 to Completion 04/01/14

All production associated with this unit reference the same LUW code

PERFORATIONS

| SERIAL NUM | COMPLETION DATE | UPPER PERF | LOWER PERF | SANDS | RESERVOIR |
|------------|-----------------|------------|------------|-------|-----------|
| 247207     | 04/04/2014      | 12064      | 17009      | TMS   | RA        |

WELL TESTS

| RPT TYP | TEST DATE  | RPT DATE   | OIL POT | COND | GAS DEL | WATER | BSW% | FLOW PRES | SHUTIN PRES | CHOKE | UPPER PERF | LOWER PERF | BOT HOLE PRES |
|---------|------------|------------|---------|------|---------|-------|------|-----------|-------------|-------|------------|------------|---------------|
| DM-1R   | 04/11/2014 | 05/01/2014 | 1136    |      |         | 614   | .1   | 1720      |             | 14    | 12064      | 17009      |               |

WELL ALLOWABLES

| EFFECTIVE DATE | END DATE   | LUW CODE | LUW TYPE CODE | ALLOWABLE | ESTIMATED POTENTIAL | CURRENT ALLOWABLE TYPE |
|----------------|------------|----------|---------------|-----------|---------------------|------------------------|
| 07/01/2014     | 12/31/2014 | 051489   | 2             | 1700      | 1136                | 1                      |
| 04/04/2014     | 06/30/2014 | 051489   | 2             | 1800      | 1250                | 1                      |
| 03/13/2014     | 04/03/2014 |          |               | 1800      | 1000                | 1                      |

Production History

LEASE/UNIT/WELL PRODUCTION

| RPT DATE   | LUW CODE | STORAGE FAC | DOC USE | WELL CNT | OPENING STK | OIL PROD(BBL) | GAS PROD(MCF) | DISPOSITION | CLOSING STK | PARISH     |
|------------|----------|-------------|---------|----------|-------------|---------------|---------------|-------------|-------------|------------|
| 07/01/2014 | 051489   |             |         | 1        | 408         | 11112         | 1984          | 10951       | 569         | TANGIPAHDA |
| 06/01/2014 | 051489   |             |         | 1        | 787         | 14175         | 3896          | 14554       | 408         | TANGIPAHDA |
| 05/01/2014 | 051489   |             |         | 1        | 551         | 20305         | 5198          | 20069       | 787         | TANGIPAHDA |
| 04/01/2014 | 051489   |             |         | 1        | 0           | 23811         | 5086          | 23260       | 551         | TANGIPAHDA |

CASING

| COMPLETION DATE | CASING SIZE | WELLBORE SIZE | CASING WEIGHT | UPPER SET DEPTH | LOWER SET DEPTH | CEMENT SACKS | TEST PRESSURE | HOURS UNDER PRESSURE | TEST DATE  | CASING PULLED | CREATION PROCESS |
|-----------------|-------------|---------------|---------------|-----------------|-----------------|--------------|---------------|----------------------|------------|---------------|------------------|
| 04/04/2014      | 0512        | 0812          | 26            | 0               | 17136           | 1760         | 2400          | .5                   |            |               | WELL HISTORY     |
| 04/04/2014      | 0958        | 1214          | 53.5          | 0               | 11400           | 1025         | 2500          | .5                   | 02/15/2014 |               | WELL HISTORY     |
| 04/04/2014      | 1338        | 1712          | 68            | 0               | 4096            | 4250         | 2000          | .5                   | 01/31/2014 |               | WELL HISTORY     |

PLUG AND ABANDON

| P and A DATE | LOCATION TYPE | CASING CUT TYPE | CASING CUT DEPTH | MUD WEIGHT LEFT | COMMENTS |
|--------------|---------------|-----------------|------------------|-----------------|----------|
|--------------|---------------|-----------------|------------------|-----------------|----------|

PLUGS

| PLUG TYPE | UPPER PLUG DEPTH | LOWER PLUG DEPTH | SACKS OF CEMENT | SLURRY WEIGHT |
|-----------|------------------|------------------|-----------------|---------------|
|-----------|------------------|------------------|-----------------|---------------|

TUBING AND PACKERS

| COMPLETION DATE | TUBING SIZE | TUBING LOWER DEPTH | TUBING UPPER DEPTH | PACKER DEPTH |
|-----------------|-------------|--------------------|--------------------|--------------|
|-----------------|-------------|--------------------|--------------------|--------------|

WORK PERMITS

| REFERENCE NUMBER | APPLICATION DATE | EXPIRATION DATE | WORK PERMIT TYPE               | WORK PERMIT STATUS | WORK PERMIT STATUS_DATE | TOTAL DEPTH | WORK_PERFORMED | DOCUMENTATION RECEIPT DATE | TEST SAND               | WORK DESCRIPTION   |
|------------------|------------------|-----------------|--------------------------------|--------------------|-------------------------|-------------|----------------|----------------------------|-------------------------|--|
| L# 0358-14       | 03/18/2014       | 03/18/2015      | HYDRAULIC FRACTURE STIMULATION | APPROVED           | 03/20/2014              | 17136       | Y              | 05/06/2014                 | TUSCALOOSA MARINE SHALE | 20 MULTI STAGE FRAC FR 17009'-12004'; GIH WITH MILL ON MOTOR AND CLEAN OUT WELL TO FC AT 17034' AND DISPLACE WITH KCL WATER; TEST CSG & ANNULUS; PUMP DOWN AND SET FTBP AT 16764' (SEE ATTACHED DETAILED COMPLETION PROCEDURE) |

This box shows the wells different completion activities

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Well Information

**Lafayette Scout Report Search**

Click here for optional ways to search  
the database for Well Information

### Mineral Resources

Codes/Lookups

Lease Related Info

### Secretary

General

HERO Application Status

Non-HERO Applications

# Lafayette Scout Details

<http://www.sonris.com/dataaccess.asp>



## Well Information

| <u>Item Name</u>                                  | <u>Standard</u> | <u>Lite</u> | <u>Report</u> | <u>ROD</u> | <u>PDF</u> |
|---|-----------------|-------------|---------------|------------|------------|
| API Well Cross Ref By Parish                      |                 |             |               | ROD        |            |
| Amended Permit To Drill                           | Standard        |             |               |            |            |
| Assessors Annual Report                           |                 |             | Report        | ROD        |            |
| Completed Wells By Date                           |                 |             |               | ROD        |            |
| Electric Logs & Directional Survey                | Standard        |             |               |            |            |
| Horizontal Wells (Current)                        |                 |             |               | ROD        |            |
| LUW History By Well                               | Standard        |             |               |            |            |
| Lafayette Gas Proration Schedule                  |                 |             |               |            | PDF        |
| Lafayette Oil Proration Schedule                  |                 |             |               |            | PDF        |
| Lafayette Scout Details                           |                 |             |               |            | PDF        |
| Lafayette Scout Summary                           |                 |             |               |            | PDF        |
| Lease Facility Inspection Report                  |                 |             | Report        |            |            |
| Monroe Gas Proration Schedule                     |                 |             |               |            | PDF        |
| Monroe Oil Proration Schedule                     |                 |             |               |            | PDF        |
| Monroe Scout Details                              |                 |             |               |            | PDF        |
| Monroe Scout Summary                              |                 |             |               |            | PDF        |
| Offshore Wells By Parish                          |                 | Lite        |               |            |            |
| Operator History By Well                          | Standard        |             |               |            |            |
| Orphan Inspection                                 | Standard        |             | Report        |            |            |
| Orphan Wells By Parish                            |                 | Lite        |               |            |            |
| Permit To Drill                                   | Standard        |             |               |            |            |
| Permitted Wells By Date                           |                 | Lite        |               | ROD        |            |
| Permitted Wells By Date/Parish                    |                 | Lite        |               |            |            |
| Permitted Wells By Permitted Date Range By Parish |                 |             |               | ROD        |            |
| Plugged And Abandoned Wells                       | Standard        |             |               |            |            |
| Production Pit Notification                       | Standard        |             |               |            |            |

# Lafayette Scouting Report

[http://sonris-www.dnr.state.la.us/web\\_post/lafa\\_sct.pdf](http://sonris-www.dnr.state.la.us/web_post/lafa_sct.pdf)



## Parish TANGIPAHOA

Field 6106

LITTLE SILVER CREEK

| Operator | Report Date | API Num        | Well Serial Number | Well Name<br>Scout Detail Status                | Well Number | Permit Date | SCT   | TWN | RNG | MRN | Total Depth |
|----------|-------------|----------------|--------------------|---|-------------|-------------|---|-----|-----|-----|-------------|
| G104     | 09/23/2014  | 17105200490000 | 248323             | TMS RA SUC;VERBERNE 5 H<br>DRILLING IN PROGRESS | 001         | 08/05/2014  | 005   | 02S | 08E | E   | 18155       |
| G104     | 09/23/2014  | 17105200500000 | 248405             | WILLIAMS 46 H<br>DRILLING IN PROGRESS           | 001         | 09/08/2014  | 046   | 02S | 08E | E   | 2630        |
|          |             |                |                    |   |             |             | FISHING ATTEMPTS UNSUCCESSFUL, TOF @ 370'; MU BIT AND SLICK BHA, TIH TO BTM, DRLG AND SURVEYING |     |     |     |             |

# Mississippi Oil & Gas Board - Home Page

<http://www.ogb.state.ms.us/default.htm>

[Home](#) | [General Information](#) | [Field Rules](#) | [Hearings](#) | [Permit Activity](#) | [Operators](#) | [Rule Book](#) | [Well Data](#) | [Publications](#) | [Related Links](#)



Mississippi State  
**MSOGB**  
Oil & Gas Board



As of April 16, 2014 the Mississippi Oil and Gas Board adopted a new version of Rule 13 ("Blowout Preventers"). Please click [here](#) for the new rule.

The Board on its own motion has filed its Petition to amend and revise existing Statewide Rule 4, "Application To Drill" and Statewide Rule 28, "Plugging and Abandonment" to be heard at the March 19, 2014 meeting of the Board. Please click [here](#) for the new proposed Rule 4 and [here](#) for the new proposed Rule 28.

As of February 19, 2014 the Mississippi Oil and Gas Board adopted a new Policy clarifying the type of fluids which may lawfully be disposed of down-hole in an approved Class II fluids injection and disposal well. Please click [here](#) for the new policy.

Please note that as of March 1, 2013 the minimum fine assessed for operators in violation of our rules and regulations will be \$2,500.00.

Look for new updates and changes in the [News and Updates](#) page.

The on-line [Rulebook](#) has been updated to include all rule changes through March, 2013.

- As of April 1, 2010, the Mississippi State Oil and Gas Board has a Web Site featuring a map of the State of Mississippi showing the location of all wells with latitudes and longitudes. All current Well Data can be obtained from this new site. The well data on the **current home page** will be maintained for historical information purposes only. For any questions or technical support you may call or e-mail the [Systems Administrators](#) at any time.

Please click the appropriate link below.

[MAPPING WEB SITE](#)

[REPORTING WEB SITE](#)

[Tuscaloosa Marine Shale \(TMS\) Development](#)

Look for new updates and changes in the [News and Updates](#) page.

Browser Name: Microsoft Internet Explorer  
Browser Version: 7.0



Mississippi State  
**MSOGB**  
Oil & Gas Board



The Program Objective of the State Oil and Gas Board is to promulgate and enforce rules to regulate and promote oil and gas drilling, production and storage so as to protect the equal and correlative rights of all owners of interests; and to promulgate and enforce rules to regulate the disposal of non-hazardous oil field waste in an environmentally safe manner consistent with federal and state regulations.

#### Mississippi State Oil & Gas Board

|                            |                     |
|----------------------------|---------------------|
| 500 Greymont Ave., Suite E | Ph: (601) 576-4900  |
| Jackson, MS 39202-3446     | Fax: (601) 354-6873 |



\*Site optimized for IE

(C) Mississippi State Oil & Gas Board, 2002-2009  
Last Updated: Wednesday, June 11, 2014

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[Suggestions or Comments](#)

# Mississippi Hearing Docket

<http://www.ogb.state.ms.us/docket.htm>



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 All Files Are In Adobe PDF

**CURRENT DOCKET**

[September 2014](#)

**2014 Board Final Decisions**

|                           |                          |                       |                        |
|---------------------------|--------------------------|-----------------------|------------------------|
| <a href="#">January</a>   | <a href="#">February</a> | <a href="#">March</a> | <a href="#">April</a>  |
| <a href="#">May</a>       | <a href="#">June</a>     | <a href="#">July</a>  | <a href="#">August</a> |
| <a href="#">September</a> |                          |                       |                        |

**2013 Board Final Decisions**

|                           |                          |                          |                          |
|---------------------------|--------------------------|--------------------------|--------------------------|
| <a href="#">January</a>   | <a href="#">February</a> | <a href="#">March</a>    | <a href="#">April</a>    |
| <a href="#">May</a>       | <a href="#">June</a>     | <a href="#">July</a>     | <a href="#">August</a>   |
| <a href="#">September</a> | <a href="#">October</a>  | <a href="#">November</a> | <a href="#">December</a> |

[Past Board Decisions.](#)

Page Last Updated : 09/22/2014 10:59:46

[General Information](#) | [Hearings](#) | [Well Data](#) | [Publications](#)

# State Oil and Gas Board



Board Members  
DAVID A. SCOTT, Jackson  
Chairman  
JAMES HEIDELBERG, Pascagoula  
Vice-Chairman  
OWEN EMERSON, Hernando  
CARROLL V. HOOD, Hazlehurst  
JOHN R. PARKER, Laurel

State Of Mississippi  
500 Greymont Ave, Suite E  
Jackson, MS 39202  
Telephone (601) 576-4900

LISA IVSHIN  
Executive Director  
HOWARD LEACH  
Board Attorney



*Monday, September 15, 2014*

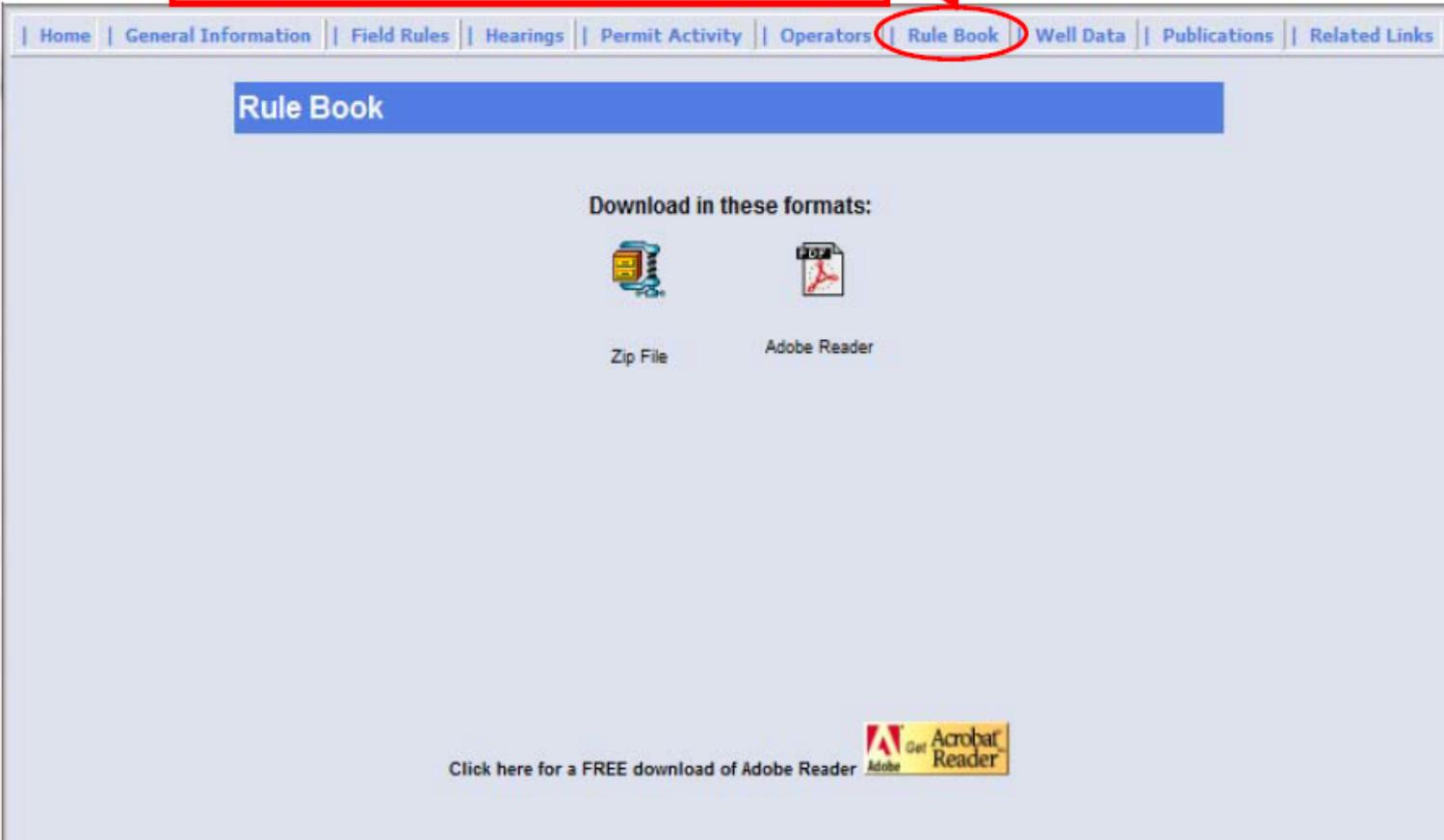
*The regular monthly meeting of the State Oil and Gas Board will be held in Suite E, 500 Greymont Avenue, Jackson, Mississippi, on the 17 of September, 2014 commencing at 9:00 am with an administrative meeting to consider such business as may come before the Board and at 10:00 am to consider the dockets hereinafter set out. Applications are on file in the office of the State Oil and Gas Board, Suite E, 500 Greymont Avenue, Jackson Mississippi for your examination.*

*All exhibits and data to be used in a hearing in support of a petition will be filed with the Supervisor at least nine (9) days prior to the hearing.*

| DOCKET NUMBER | CONTINUED DOCKET   |
|---------------|--|
| 216-2014-D    | <p><u><b>SW EAST FORK FIELD - Amite County.</b></u></p> <p>On the Board's own motion, Show Cause Order 247-2014 was issued to Array Operating, LLC, as to why it should not be penalized for violation of Statewide Rule 4, Permit to Drill, for the Clyde E. Whittington No.1, the Whittington No. 8, the Whittington No. 9 and the Whittington No. 7 Wells, located in Section 4, Township 2 North, Range 5 East, the Whittington No. 1 and the Whittington No. 2 Wells, located in Section 33, Township 3 North, Range 5 East, and the Whittington No. 13 and the Whittington No. 10 Wells, located in Section 5, Township 2 North, Range 5 East.</p>   |
| 270-2014-D    | <p><u><b>ALFRED C. MOORE FIELD - Amite County.</b></u></p> <p>Petition of EnCana Oil and Gas (USA), Inc., requesting the Board to integrate all interests in an exceptional sized 2,019-acre oil unit, situated in Sections 4, 11, 12, 18 and 19, Township 2 North, Range 2 East, to horizontally drill the Boudreaux 12H No. 1 Well at an exception surface location due to engineering, geological and topographical reasons 1,192' FNL of Section 18 and 240' FEL of Section 12, to a depth of 12,005' to test the Tuscaloosa Marine Shale Formation at an exception bottomhole location 200' FNL and 1,107' FEL of Section 4. Petitioner also requests authority to drill the Boudreaux 12H No. 2 Well as an increased density well at an exception surface location 1,142' FNL of Section 18 and 239' FEL of Section 12, to a depth of 12,105' to test the Tuscaloosa Marine Shale Formation at an exception bottomhole location 200' FSL and 1,565' FEL of Section 19, with the right to horizontally drill up to six additional wells on the unit with an unrestricted eighteen month test period for each well to establish a maximum efficiency rate (MER) of production for said pool, to produce said wells without tubing as an exception to Statewide Rule 18 and to not run logs as an exception to Statewide Rule 24.</p> |

# MSOGB Rulebook

When you Click on **Rule Book** from the Home Screen this screen appears giving you options in the below formats.



The screenshot shows a web application interface with a navigation bar at the top containing links: Home, General Information, Field Rules, Hearings, Permit Activity, Operators, Rule Book, Well Data, Publications, and Related Links. The 'Rule Book' link is circled in red, with a red arrow pointing from the text box above to it. Below the navigation bar is a blue header with the text 'Rule Book'. Underneath, the text 'Download in these formats:' is followed by two icons: a Zip File icon and an Adobe Reader icon. Below each icon is its respective label: 'Zip File' and 'Adobe Reader'. At the bottom of the page, there is a link that says 'Click here for a FREE download of Adobe Reader' next to the Adobe Acrobat Reader logo.

# State of Mississippi



*Statutes*

*Rules of Procedure*

*Statewide Rules and Regulations*

**DAVID A. SCOTT, Chairman**

**JAMES H. HEIDELBERG, Vice-Chairman**

**OWEN EMERSON**

**CARROLL V. HOOD**

**JOHN R. PARKER**

**BOARD ATTORNEY**

**HOWARD LEACH**

**LISA A. IVSHIN**

**Executive Director**

# MSOGB Mapping Website

<http://gis.ogb.state.ms.us/MSOGBOnline/>



## Mississippi State Oil and Gas Board

Reporting

[MSOGB Home](#) [Restart Session](#) [Help](#)

This Web application is in development, and the information represented in it was derived from a variety of sources. Therefore, the Oil & Gas Board makes no warranties as to the completeness, accuracy, reliability, or sustainability of the data, and site visitors assume full responsibility for any conclusions derived through the use of this Web application.

The screenshot shows the MSOGB Mapping Website interface. On the left, there is a search bar with a 'Switch to Advanced Filter' button. Below the search bar, the text 'crosby 12' is entered, and the 'Find' button is highlighted. Below the search bar, the 'Wells (20 records)' list is expanded, and the well 'CROSBY 12-1H 1 2315722037' is selected. On the right, there is a map showing the location of the well. Below the map, there is a 'Well Information' panel for the selected well. The panel shows the well name 'Crosby 12-1H', API Well # '23157220371000', Type 'OIL - Production', Status 'PR - Producing', and Field 'HENRY'. Below the well information, there are tabs for 'General', 'Location', 'Images', 'Documents', 'Construction', 'Dates', 'Injection', 'Production', 'Permit', 'History', and 'MIT'. The 'Dates' tab is selected, and the 'Current Operator' is 'GOODRICH PETROLEUM COMPANY, LLC' and 'Bond?' is 'Yes'. Below the well information, there is an 'Associated Wells' section with a link to '23157220371000'.

1. Type name of well
2. Click Find
3. Click to expand the Wells list
4. Find and click the desired well from list

Information for the well chosen above appears here at the bottom of the screen  
Name, API#, Type, Status, Field & Operator

Click on the following buttons for more info:

- Location: Displays the STR, Lat./Long. & County
- Documents: Displays Documents filed with MSOGB click view and the individual docs will open
- Dates: Displays dates of important stages and statuses of well
- Production: Displays production

# Mississippi State Oil and Gas Board

## Reporting

## MSOGB Home Restart Session Help

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### Search

Switch to Advanced Filter

Search:

Dropdown:  Previous

Wells (20 records)

- CROSBY -WARE 12-F 1 1 2315721878
- CROSBY 1-12 1 2315722032
- CROSBY 10-12 1 1 2315720730
- CROSBY 12-1H 1 2315722037
- CROSBY 12-6 1 1 2315720460
- CROSBY 14-12 1 1 2315720872
- CROSBY 2-12 1 2315722003
- CROSBY 2-12 1 1 2315720411
- CROSBY 21-12 1 1 2315720401
- CROSBY 22-12 1 1 2300520157
- CROSBY 25-12 1 1 2315720415
- CROSBY 30-12 1 1 2315720605
- CROSBY 31-12 1 2315722018
- CROSBY 41-12 1 1 2315720823

### Map

Map showing well locations with various symbols (red stars, green circles, blue diamonds) and a tooltip. The map includes a toolbar with navigation and zoom controls.

### Details

#### Well Information

|          |              |            |                |              |                  |                |                           |        |         |     |
|----------|--------------|------------|----------------|--------------|------------------|----------------|---------------------------|--------|---------|-----|
| Name     | Crosby 12-1H | API Well # | 23157220371000 | Type         | OIL - Production | Status         | PR - Producing            | Field  | HENRY   |     |
| General  | Location     | Images     | Documents      | Construction | Dates            | Injection      | Production                | Permit | History | MIT |
| Section  | 12           | TWP        | 2N             | RNG          | 1W               | Sectional Desc |                           |        |         |     |
| Latitude | 31.14601     | Longitude  | -91.16338      | Elev Gr      | 220              | County         | <a href="#">WILKINSON</a> |        |         |     |
| NS Feet  |              | From N/S   |                | EW Feet      |                  | From E/W       |                           |        |         |     |

**Location:** Displays the STR, Lat./Long. & County

# Mississippi State Oil and Gas Board

## Reporting

[MSOGB Home Restart Session Help](#)

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### Search

Switch to Advanced Filter

Wells (20 records)

- ..... CROSBY -WARE 12-F 1 1  
..... 2315721878
- ..... CROSBY 1-12 1 2315722032
- ..... CROSBY 10-12 1 1 2315720730
- ..... CROSBY 12-1H 1 2315722037
- ..... CROSBY 12-6 1 1 2315720460
- ..... CROSBY 14-12 1 1 2315720872
- ..... CROSBY 2-12 1 2315722003
- ..... CROSBY 2-12 1 1 2315720411
- ..... CROSBY 21-12 1 1 2315720401
- ..... CROSBY 22-12 1 1 2300520157
- ..... CROSBY 25-12 1 1 2315720415
- ..... CROSBY 30-12 1 1 2315720605
- ..... CROSBY 31-12 1 2315722018
- ..... CROSBY 41-12 1 1 2315720823

### Map

Tooltip:  On  Off

### Details

#### Well Information

|                 |                 |                                      |                  |                     |                  |                  |                   |               |                |            |
|-----------------|-----------------|--------------------------------------|------------------|---------------------|------------------|------------------|-------------------|---------------|----------------|------------|
| <b>Name</b>     | Crosby 12-1H    | <b>API Well #</b>                    | 23157220371000   | <b>Type</b>         | OIL - Production | <b>Status</b>    | PR - Producing    | <b>Field</b>  | HENRY          |            |
| <b>General</b>  | <b>Location</b> | <b>Images</b>                        | <b>Documents</b> | <b>Construction</b> | <b>Dates</b>     | <b>Injection</b> | <b>Production</b> | <b>Permit</b> | <b>History</b> | <b>MIT</b> |
| <b>Log Type</b> | <b>Sub Type</b> | <b>Description</b>                   | <b>Number</b>    | <b>File Size</b>    | <b>Source</b>    |                  |                   |               |                |            |
| LOG             | GR              | <a href="#">2315722037_GR.tif</a>    | 0                | 5300860             |                  |                  |                   |               |                |            |
| LOG             | GR              | <a href="#">2315722037_GR2.tif</a>   | 2                | 4138444             |                  |                  |                   |               |                |            |
| LOG             | GR              | <a href="#">2315722037_GR3.tif</a>   | 3                | 6902684             |                  |                  |                   |               |                |            |
| LOG             | GRTVD           | <a href="#">2315722037_GRTVD.tif</a> | 0                | 4159812             |                  |                  |                   |               |                |            |
| LOG             | I               | <a href="#">2315722037_I.tif</a>     | 0                | 9351996             |                  |                  |                   |               |                |            |

**PATHFINDER**  
A Schlumberger Company

5" x 10" - 100' - 100' SHEET NO.

COMPANY : GEOSPEC PETROLEUM COMPANY, LLC  
WELL : GEOSPEC MINERALLS 12-1- HI PLOT/1 BORE  
FIELD : WISCONSIN  
COUNTY : WILKINSON  
STATE : MS  
COUNTRY : USA  
API WELL NO. : 23-157-21637 G.A.

WELL LOCATION  
LAT: 33°09'49"N LONG: 91°41'49"W  
ELEVATION: 1123.00' (VD)  
ELEVATION: 1123.00' (VD)  
ELEVATION: 1123.00' (VD)

DATE EST. : 2012-08-21  
REVISIONS : 24 OF 02 (REVISION TABLE - GEOSPEC LEVEL)  
ACTIVITY : 24-08-12 (REVISION TABLE - REAM SEA LEVEL)

LOGGING RECORD

| DEPTH IN | DEPTH OUT | LOGGING TIME | LOGGING TIME | LOGGING TIME | LOGGING TIME |
|----------|-----------|--------------|--------------|--------------|--------------|
| 11 1/4   | 11 1/4    | 1175         | 1175         | 1175         | 1175         |
| 8 1/2    | 8 1/2     | 1200         | 1200         | 1200         | 1200         |

OTHER SERVICES  
DIRECTIONAL  
NONE

**RECEIVED**  
MAR - 8 - 2012

STATION: TX A GAS/INDIA  
WELL NO.: 23-157-21637  
WELL NAME: GEOSPEC MINERALLS 12-1- HI PLOT/1 BORE  
WELL TYPE: OIL BASED  
WELL STATUS: ACTIVE  
WELL DEPTH: 1175'  
WELL DATE: 2012-08-21  
WELL TIME: 1175  
WELL TIME: 1200  
WELL TIME: 1175  
WELL TIME: 1200

WELL DATA

| ROW NUMBER         | 1          | 2          |
|--------------------|------------|------------|
| START DATE         | 25-OCT-12  | 15-OCT-12  |
| STOP TIME          | 17:00      | 19:40      |
| END DATE           | 27-OCT-12  | 02-NOV-12  |
| END TIME           | 16:40      | 05:30      |
| DEPTH IN FT        | 1175       | 1200       |
| DEPTH OUT FT       | 1200       | 1200       |
| LOG TOP FT         | 1275       | 1285       |
| LOG BOTTOM FT      | 1265       | 1275       |
| SOLE SIZE IN       | 8 1/2      | 8 1/2      |
| WID DATA # FT      | 1200       | 1200       |
| WID TYPE           | OIL BASED  | OIL BASED  |
| DENSITY lb/gal     | 11.00      | 11.10      |
| VISCOSITY cp       | 50         | 45         |
| JE                 |            |            |
| FLUID LOSS cm/30   | 6.4        | 6.4        |
| SALINITY ppm       | 1000       | 1000       |
| In clon # deg F    | 0          | 0          |
| Out clon # deg F   | 0          | 0          |
| WAL REC TEMP deg F | 200        | 200        |
| In @ 415 TEMP clon |            |            |
| LWD ENGINEER #1    | A. BABEYCH | B. BABEYCH |
| LWD ENGINEER #2    | T. RILEY   | T. RILEY   |
| LWD ENGINEER #3    |            |            |

REMARKS

GEOSPEC PETROLEUM COMPANY, LLC APR #: 13116468-1  
WALFINDER JOB #: 12641155

ALL LOGGING DATA IS TRANSMITTED ONLY UNLESS STATED OTHERWISE.  
ALL REFERENCES TO LOG TOP, LOG BOTTOM, OR LOGGING TOOL DEPTH REFER TO THE GAMMA-RAY SENSOR UNLESS STATED OTHERWISE.  
ALL ANNOTATIONS IN THE DEPTH TRACK ARE REFERENCED TO DEPT DEPTH.

THIRD PARTY DEPTH TRACKING SERVICES PROVIDED BY INCON.

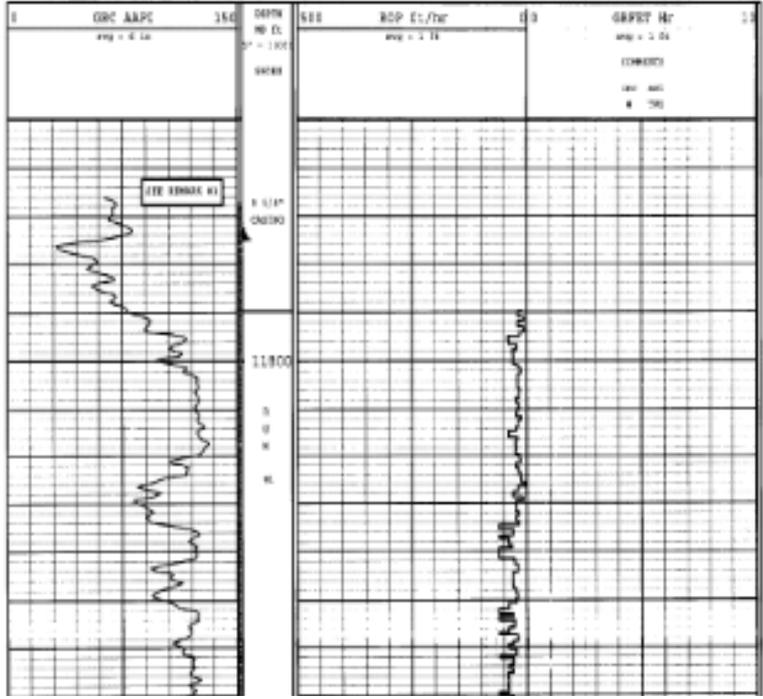
RUN #1: 6 3/4" BBS-12/GAMMA LOGGING RUN  
RUN #2: 6 3/4" BBS-12/GAMMA LOGGING RUN

REMARK #1: GAMMA-RAY LOGGED THROUGH CASING FROM 1175' - 1175' MD (1162' - 1175' FVD).  
REMARK #2: GAMMA-RAY FROM 1265' - 1274' MD (1249' - 1254' FVD) LOGGED WHILE BEARING 113 HOURS AFTER  
SHILLING, BOP AND FORMATION EXPOSURE TIME (EXPT) OVER THE CORRESPONDING INTERVAL ARE NOT  
PROVIDED.

NOTICE - All interpretations are based on information and data provided by the client and are not guaranteed by Schlumberger. Schlumberger is not responsible for the loss, theft, damage or misuse of information or data provided by the client. Schlumberger is not responsible for the loss, theft, damage or misuse of information or data provided by the client. Schlumberger is not responsible for the loss, theft, damage or misuse of information or data provided by the client. Schlumberger is not responsible for the loss, theft, damage or misuse of information or data provided by the client.

PATHFINDER - A Schlumberger Company

Version No : 831 74.00C Release 140012012  
Plot Time : 21-Dec-2012 10:42



# Mississippi State Oil and Gas Board

## Reporting

[MSOGB Home Restart Session Help](#)

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### Search

Switch to Advanced Filter

crosby 12

crosby 12

Wells (20 records)

- CROSBY -WARE 12-F 1 1 2315721878
- CROSBY 1-12 1 1 2315722032
- CROSBY 10-12 1 1 2315720730
- CROSBY 12-1H 1 1 2315722037
- CROSBY 12-6 1 1 2315720460
- CROSBY 14-12 1 1 2315720872
- CROSBY 2-12 1 1 2315722003
- CROSBY 2-12 1 1 2315720411
- CROSBY 21-12 1 1 2315720401
- CROSBY 22-12 1 1 2300520157
- CROSBY 25-12 1 1 2315720415
- CROSBY 30-12 1 1 2315720605
- CROSBY 31-12 1 1 2315722018
- CROSBY 41-12 1 1 2315720823

### Map

Tooltip:  On  Off

**Documents:** Displays Documents filed with MSOGB click view and the individual docs will open

### Details

| AP1. 2315722037 | Directional Survey (2) | <a href="#">View</a> | 6/20/2013 8:26:44 AM  |
|-----------------|------------------------|----------------------|-----------------------|
| AP1. 2315722037 | Form 2                 | <a href="#">View</a> | 5/29/2012 6:17:57 PM  |
| AP1. 2315722037 | Form 21                | <a href="#">View</a> | 9/12/2013 8:38:20 PM  |
| AP1. 2315722037 | Form 3                 | <a href="#">View</a> | 8/16/2013 11:11:38 PM |
| AP1. 2315722037 | Form 8                 | <a href="#">View</a> | 8/28/2013 11:17:33 AM |
| AP1. 2315722037 | Plat                   | <a href="#">View</a> | 4/1/2013 8:06:12 PM   |
| AP1. 2315722037 | Spud Report            | <a href="#">View</a> | 10/9/2012 8:09:35 PM  |
| AP1. 2315722037 | Verbal to Transport    | <a href="#">View</a> | 2/11/2013 10:26:21 PM |

**Form 2 - Permit to Drill**

**Form 3 - Completion Report**

**Form 8 - Operator's Certificate of Compliance & Authorization to Transport Oil & Gas**

**Plat**

**Spud Report**

# Form 2 - Permit to Drill



## MISSISSIPPI STATE OIL & GAS BOARD APPLICATION FOR PERMIT TO DRILL, WORKOVER OR CHANGE OPERATOR

|  |  |  |                          |   |  |                          |                                     |
|--|--|--|--------------------------|---|--|--------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> APPLICATION TO DRILL   |  | <input type="checkbox"/> WORKOVER              |                          | <input type="checkbox"/> CHANGE OF OPERATOR   |  | 200316                   |                                     |
| NAME OF COMPANY OR OPERATOR<br>Goodrich Petroleum Company, LLC   |  |  |                          | DATE<br>05/23/2012  |  |                          |                                     |
| ADDRESS<br>333 Texas Street, Suite 1375<br>Shreveport, LA 71101  |  |  |                          | TELEPHONE<br>(318) 429-1375   |  |                          |                                     |
| NAME OF WELL<br>Crosby 12-1H   |  | WELL NO.<br>1                                  |                          | ELEVATOR (GROUND)   |  |                          |                                     |
| WELL LOCATION (WHEN POSSIBLE, GIVE FOOTAGE FROM SECTION LINES)<br>SL: 1467 feet West of the East line and 350 feet North of the South line of S12<br>BHL: 1550 feet West of the East line and 2423 feet North of the South line of S1  |  |  |                          | SECTION - TOWNSHIP - RANGE<br>1 & 12 T2N R1W  |  |                          |                                     |
|  |  |  |                          | LATITUDE - LONGITUDE (NEW WELLS) (if any)   |  |                          |                                     |
| WILDCAT Tuscaloosa Marine Shale Oil Pool   |  |  |                          | APPROX. DATE WORK BEGINS  |  |                          |                                     |
| PROPOSED DEPTH<br>TVD 12,500 FEET  |  | PROPOSED LENGTH OF SURFACE CASING<br>3200 FEET |                          | NUMBER OF ACRES IN DRILLING UNIT<br>1312.42+/- ACRES  |  |                          |                                     |
|  |  |  |                          | DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING UNIT LINE<br>350 FEET   |  |                          |                                     |
|  |  |  |                          | DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED FOR WELL<br>more than 3000 FEET   |  |                          |                                     |
| NAME OF CALLER OR REQUESTOR  |  |  |                          |   |  |                          |                                     |
| ADDRESS  |  |  |                          |   |  |                          |                                     |
| CITY   |  |  |                          |   |  |                          |                                     |
| STATE  |  |  |                          |   |  |                          |                                     |
| ZIP  |  |  |                          |   |  |                          |                                     |
| FOR CHANGE OF OF AUTHORIZED REPRESENTATIVE SIGNATURE<br>JAMES E. (Sonny) ZEIGLER<br>RECORDER - 783-5468<br>MOBILE - 443-1791<br>FAX - 987-6426   |  |  |                          | OPERATOR REQUIRED FOR TRANSFER OF WELL<br>NAME OF OPERATOR  |  |                          |                                     |
| NOTE: AREA FIELD INSPECTOR OR FIELD ENGINEER (OR BOTH OFFICE) OF DATES OF SPUDDING AND REACHING TOTAL DEPTH.<br>Mississippi State Oil and Gas Board, 516 Graymont Avenue, Suite E, Jackson, MS 39207 661-354-7142  |  |  |                          |   |  |                          |                                     |
| REMARKS: (IF THIS IS AN APPLICATION TO WORKOVER, BRIEFLY DESCRIBE WORK TO BE DONE, GIVING PRESENT PRODUCING ZONE AND EXPECTED NEW PRODUCING ZONE)<br>Petition to force integrate with alternate charges, approve an exception unit and exception locations, drill up to four wells on the unit, and obtain related relief, Docket No. 146-2012-D<br><br>To connect type on plot - from Mississippi East Zone to Mississippi West Zone (Revised: May 10, 2012)<br>See attached plot |  |  |                          |   |  |                          |                                     |
| <div style="border: 1px solid blue; padding: 5px; display: inline-block; color: blue; font-weight: bold;">RECEIVED</div><br><div style="color: red; font-weight: bold; margin-top: 5px;">MAY 23 2012</div><br><div style="color: blue; font-weight: bold; margin-top: 5px;">STATE OIL &amp; GAS BOARD</div>  |  |  |                          |   |  |                          |                                     |
| ARE THERE SEPARATELY OWNED TRACTS OR INTERESTS IN THE DRILLING UNIT FOR WHICH THIS PERMIT IS SOUGHT? (REF. MS. STATUTE 53-3-7)   |  | YES  | NO                       | IF YES, HAVE THE PERSONS OWNING THE DRILLING RIGHTS IN SAID TRACTS OR INTERESTS AND THE RIGHTS TO SHARE IN THE PRODUCTION THEREFROM AGREED TO DEVELOP THEIR LANDS AS A DRILLING UNIT AND TO THE DRILLING OF THE WELL? (REF. MS. STATUTE 53-3-7) |  | YES                      | NO                                  |
|  |  | <input checked="" type="checkbox"/>            | <input type="checkbox"/> |   |  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Executed this the <u>23rd</u> day of <u>May</u> , 20 <u>12</u>   |  |  |                          |   |  |                          |                                     |
| State of <u>Mississippi</u>  |  |  |                          | Signature of Affiant  |  |                          |                                     |
| County of <u>Madison</u>   |  |  |                          | Glenn Gates Taylor  |  |                          |                                     |
| Before me, the undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath, states that he is duly authorized to make the above report and that he has knowledge of the facts stated herein, and that said report is true and correct.  |  |  |                          |   |  |                          |                                     |
| Subscribed and sworn to me this <u>23rd</u> day of <u>May</u> , 20 <u>12</u>   |  |  |                          |   |  |                          |                                     |
| SEAL<br>Commission Expires March 13, 2015  |  | Signature <u>Teresa E. Molinar</u>             |                          | Notary Public In and for <u>Mississippi</u> County <u>Madison</u>   |  |                          |                                     |
| PERMIT NUMBER <u>2012-000-264</u>  |  |  |                          |   |  |                          |                                     |
| APPROVAL DATE <u>5/16/2012</u>   |  |  |                          |   |  |                          |                                     |
| APPROVED BY <u>TRV J BORDO</u>   |  |  |                          |   |  |                          |                                     |
| NOTICE: BEFORE SENDING THIS FORM, BE SURE THAT ALL INFORMATION REQUESTED IS GIVEN. SEE INSTRUCTIONS ON REVERSE SIDE OF FORM.   |  |  |                          |   |  |                          |                                     |
| <div style="border: 1px solid black; padding: 5px; display: inline-block;">                 MISSISSIPPI STATE OIL &amp; GAS BOARD<br/>                 APPLICATION FOR PERMIT TO DRILL,<br/>                 WORKOVER OR CHANGE OPERATOR<br/>                 FORM 2 (Rev. 4/01)<br/>                 A. P. I. WELL NUMBER<br/>                 STATE <u>MS</u> COUNTY <u>157</u> WELL <u>22037-10</u> </div>  |  |  |                          |   |  |                          |                                     |

# Form 3 - Completion Report



**MISSISSIPPI STATE OIL & GAS BOARD**  
**ORIGINAL WELL COMPLETION AND/OR RECOMPLETION REPORT AND WELL LOG**

| INDICATE TYPE OF COMPLETION  |                    |  |  |   |  |   |  |                                       |          |            |
|--|--------------------|--|--|---|--|---|--|---------------------------------------|----------|------------|
| NEW WELL   | REENTRY            | WORKOVER   | DEEPEN   | PLUG BACK                                       | SAME RESERVOIR   | DIFFERENT RESERVOIR   | OIL  | GAS                                   | INJECTOR | BIT        |
| X  |                    |  |  |   |  |   | X  |                                       |          |            |
| DESCRIPTION OF WELL AND LEASE  |                    |  |  |   |  |   |  |                                       |          |            |
| OPERATOR<br>Goodrich Petroleum Company, LLC  |                    |  | ADDRESS<br>801 Louisiana St Suite 700, Houston, TX 77002                               |   |  |   |  |                                       |          |            |
| LEASE NAME<br>Crosby 12-1H   |                    |  | WELL NUMBER<br>1   |   | FIELD & RESERVOIR<br>Henry, Tuscaloosa Marine Shale Oil Pool |   |  |                                       |          |            |
| LOCATION<br>350' FSL & 1467' FEL   |                    |  | SEC. - TWP. - RGE, LAT AND LONG<br>All of S1 & S12, T2N, R1W                           |   | AR NO.<br>23-157-22037-10                                    |   | DIRECTIONAL VERTICAL OR HORIZONTAL<br>Horizontal |                                       |          |            |
| COUNTY<br>Wilkinson  |                    | PERMIT NUMBER<br>2012-CPD-264  |  | DATE ISSUED<br>07/11/2012                       |  | PREVIOUS PERMIT NUMBER  |  | DATE ISSUED                           |          |            |
| DATE SHUDDER<br>10/04/2012   |                    | DATE TOTAL DEPTH REACHED<br>12/26/2012   |  | DATE OF THIS COMPLETION<br>02/02/2013           |  | ELEVATION OF RIG OR BIT OR GRD<br>219.7   |  | ELEVATION OF CASING ID. FLANGE        |          |            |
| TOTAL DEPTH<br>19551 MD  |                    | R.G.T.D.<br>19381  |  | SINGLE OR DOUBLE OR TRIPLE COMPLETION<br>Single |  | IF THIS IS A DOUBLE OR TRIPLE COMPLETION, NUMBER SEPARATE REPORT FOR EACH COMPLETION. |  |                                       |          |            |
| PERFORATIONS FOR THIS COMPLETION, FORMATION<br>12,608'-19,283'                             |                    |  |  |   |  |   |  |                                       |          |            |
| HAS THIS WELL DIRECTIONALLY DRILLED?   |                    |  |  |   | HAS DIRECTIONAL SURVEY MADE?                                 |   |  | HAS COPY OF DIRECTIONAL SURVEY FILED? |          | DATE FILED |
| Yes  |                    |  |  |   | Yes  |   |  | Yes                                   |          | 03/05/2013 |
| LIST ALL ELECTRICAL LOGS RUN FOR THIS COMPLETION, SERVICE COMPANY AND DATE FILED           |                    |  |  |   |  |   |  |                                       |          |            |
| <b>Resistivity and Gamma Ray</b>   |                    |  |  |   |  |   |  |                                       |          |            |
| CASING RECORD  |                    |  |  |   |  |   |  |                                       |          |            |
| CASING WEIGHTS: 24.5 LBS/FT (2 1/2"), 28.5 LBS/FT (3"), 35 LBS/FT (3 1/2"), 42 LBS/FT (4") |                    |  |  |   |  |   |  |                                       |          |            |
| PURPOSE  | SIZE HOLE DRILLED  | SIZE CASING SET  | WEIGHT (LBS/FT)  | DEPTH SET                                       | SACKS CEMENT   | AMOUNT PULLED   |  |                                       |          |            |
| Conductor  | 30                 | 20   | 106.5  | 90'   | 212  |   |  |                                       |          |            |
| Surface  | 17 1/2             | 13 3/8   | 60   | 3440  | 2065   |   |  |                                       |          |            |
| Intermediate   | 12 1/4             | 9 5/8  | 53.5   | 11775   | 2160   |   |  |                                       |          |            |
| Production   | 6 3/4              | 5 1/2  | 26   | 19417   | 740  |   |  |                                       |          |            |
| TUBING RECORD  |                    | RATCHER SET AT   |  | LINEAR RECORD                                   |  | SACKS CEMENT  | SCREEN   |                                       |          |            |
| SIZE   | DEPTH SET          | SIZE   | IN   | TOP   | BOTTOM   | FT  | FT   |                                       |          |            |
|  |                    |  |  | 11135   | 12605  | 230   |  |                                       |          |            |
| PERFORATION RECORD THIS COMPLETION   | DEPTH INTERVAL     | SERVICE COMPANY  | ACID, SHOT, FRACTURE, CEMENT SOLUENEZE RECORD  | DEPTH INTERVAL                                  |  |   |  |                                       |          |            |
| NUMBER PER FOOT  | SIZE & TYPE        |  | AMOUNT & TYPE OF MATERIAL USED   |   |  |   |  |                                       |          |            |
| 7  | .45                | 19088-19289 Halliburton  | 449,000 PROP & 12,044 SLS TOT CLEAN  | 19088-19289                                     |  |   |  |                                       |          |            |
| 7  | .45                | 18818-19019 Halliburton  | 495,200 PROP & 9,103 SLS TOT CLEAN   | 18818-19019                                     |  |   |  |                                       |          |            |
| LIST ALL OTHER PERFORATIONS RECORDS AND TEST RESULTS CONT'D ON BACK                        |                    |  |  |   |  |   |  |                                       |          |            |
| 7  | .45                | 18548-18749 Halliburton  | 451,300 PROP & 12,000 SLS TOT CLEAN  | 18548-18749                                     |  |   |  |                                       |          |            |
| 7  | .45                | 18278-18479 Halliburton  | 451,120 PROP & 12,194 SLS TOT CLEAN  | 18278-18479                                     |  |   |  |                                       |          |            |
| 7  | .45                | 18008-18209 Halliburton  | 450,300 PROP & 12,572 SLS TOT CLEAN  | 18008-18209                                     |  |   |  |                                       |          |            |
| 7  | .45                | 17738-17939 Halliburton  | 449,200 PROP & 12,390 SLS TOT CLEAN  | 17738-17939                                     |  |   |  |                                       |          |            |
| DATE OF FIRST PRODUCTION INJECTION<br>02/02/2013   |                    | PRODUCING METHOD (Indicate if Flowing, See L.S. or Pumping - If Pumping, Indicate Size & Type of Pumps)<br>Flowing |  |   |  |   |  |                                       |          |            |
| DATE OF TEST<br>02/07/2013   | HOURS TESTED<br>24 | CASING SIZE<br>15  | OIL PRODUCED DURING TEST<br>1174   |   |  |   |  |                                       |          |            |
| TUBING PRESSURE<br>2550  |                    | CASING PRESSURE<br>2550  | CALCULATED RATE OF PRODUCTION PER 24 HRS.<br>OIL 1174 SLS, GAS 858 MCF, WATER 1056 SLS |   |  |   |  |                                       |          |            |
| REPERFORATION OF GAS (State Whether Vertical, Used for Fund or Back)                       |                    | FOUR GAS OR OIL  |  |   |  |   |  |                                       |          |            |
| Flared   |                    | AMOUNT H <sub>2</sub> S  |  |   |  |   |  |                                       |          |            |

Effective Jan. 1, 2007, no authorization to transport Oil or Gas from location will be approved until a completion report 3 and all electric surveys have been filed with the Mississippi Oil and Gas Board.

# Form 8 - Operator's Certificate of Compliance & Authorization to Transport Oil & Gas



*Sorry*

## MISSISSIPPI STATE OIL & GAS BOARD OPERATOR'S CERTIFICATE OF COMPLIANCE & AUTHORIZATION TO TRANSPORT OIL OR GAS FROM DRILLING UNIT

|   |                 |                                 |  |                           |                           |
|---|-----------------|---------------------------------|--|---------------------------|---------------------------|
| Well Name & No.<br>Crosby 12-1H   |                 | Field<br>Henry                  | Pool<br>Tuscaloosa Marine Shale Oil Pool                 |                           |                           |
| Sec-Twp-Range<br>All of S1 @ S12, T2N, R1W  |                 | County<br>Wilkinson             | State<br>Mississippi                                     |                           |                           |
| Operator<br>Goodrich Petroleum Company  |                 | API No.<br>23-157-22037-10      |  |                           |                           |
| Street<br>801 Louisiana St. Suite 700   | City<br>Houston | State<br>TX                     | Zip<br>77002   | Telephone<br>832-399-3156 |                           |
| <b>AUTHORIZED TRANSPORTER:</b>  |                 |                                 |  |                           |                           |
| Above named operator addresses (name of transporter)<br>Business Grade Oil & P.   |                 |                                 |  |                           |                           |
| Transporter's street address<br>815 Miami Street, Suite 2100  |                 | City<br>Houston                 | State<br>TX  | Zip<br>77002              | Telephone<br>713-595-2631 |
| Field address<br>P.O. Box 395, Soso, Mississippi, 39480   |                 |                                 |  |                           |                           |
| Oil, condensate, gas, well gas, casinghead gas  |                 |                                 |  |                           |                           |
| To transport <u>100</u> % of the <u>oil</u> from said drilling  |                 |                                 |  |                           |                           |
| <b>OTHER GATHERERS TRANSPORTING FROM THIS DRILLING UNIT ARE AS FOLLOWS:</b>   |                 |                                 |  |                           |                           |
| Name of gatherer  |                 | % transported                   | Product transported                                      |                           |                           |
|   |                 |                                 | <b>RECEIVED</b><br>JUL 2 5 2013<br>STATE OIL & GAS BOARD |                           |                           |
| Indicate whether or not this certificate is for a new drilling unit, if not a new drilling unit, indicate whether or not it is a change of operator, change of drilling unit name, or change of gatherer and give effective date of change. |                 |                                 |  |                           |                           |
| <b>New drilling unit</b>  |                 |                                 |  |                           |                           |
| Completion Date:<br>02/02/2013  |                 | Perforation:<br>12,000'-19,289' |  |                           |                           |

The undersigned certifies that the rules and regulations of the Mississippi State Oil and Gas Board have been complied with in drilling and producing operations on this drilling unit, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described drilling unit and that this authorization will be valid until further notice or until cancelled by the State Oil and Gas Board.

Executed this the 19th day of July, 2013

State of Texas

County of Harris

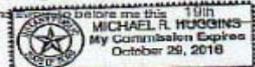
*Shelley Copeland*  
Signature of Operator

Before me, the undersigned authority, on this day personally appeared Shelley Copeland known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath, states that he is duly authorized to make the above report and that he has knowledge of the facts stated herein, and that said report is true and correct.

Subscribed and sworn to before me this 19th day of July, 2013

DEAL

My commission expires

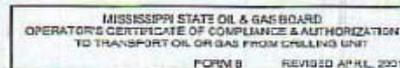


Signature Michael R. Higgins  
Notary Public in and for Texas  
County HARRIS

Oil Allowable 8-19-2013 BBL/DAY

APPROVAL DATE 8-19-2013

APPROVED BY *Jenny Zeigler*  
STATE OIL & GAS BOARD



**RECEIVED**  
JUL 22 2013

# Mississippi State Oil and Gas Board

## Reporting

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### Search

Switch to Advanced Filter

crosby 12 Find

crosby 12 Previous

Wells (20 records)

- CROSBY -WARE 12-F 1 1  
2315721878
- CROSBY 1-12 1 2315722032
- CROSBY 10-12 1 1 2315720730
- CROSBY 12-1H 1 2315722037
- CROSBY 12-6 1 1 2315720460
- CROSBY 14-12 1 1 2315720872
- CROSBY 2-12 1 2315722003
- CROSBY 2-12 1 1 2315720411
- CROSBY 21-12 1 1 2315720401
- CROSBY 22-12 1 1 2300520157
- CROSBY 25-12 1 1 2315720415
- CROSBY 30-12 1 1 2315720605
- CROSBY 31-12 1 2315722018
- CROSBY 41-12 1 1 2315720823

### Map

Tooltip:  On  Off

### Details

#### Well Information

Name Crosby 12-1H API Well # 23157220371000 Type OIL - Production Status PR - Producing Field HENRY

General Location Images Documents Construction Dates Injection Production Permit History MII

| Event                  | Date       |
|------------------------|------------|
| Status Change Date     | 04/15/2013 |
| Field Change           | 04/01/2013 |
| Completion Report Date | 03/08/2013 |
| Completion Review Date | 03/08/2013 |
| Status Change Date     | 03/06/2013 |

**Dates:** Displays dates of important stages and statuses of well

# Mississippi State Oil and Gas Board

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### Search

Switch to Advanced Filter

Previous

Wells (20 records)

- CROSBY -WARE 12-F 1 1 2315721878
- CROSBY 1-12 1 1 2315722032
- CROSBY 10-12 1 1 2315720730
- CROSBY 12-1H 1 1 2315722037
- CROSBY 12-6 1 1 2315720460
- CROSBY 14-12 1 1 2315720872
- CROSBY 2-12 1 1 2315722003
- CROSBY 2-12 1 1 2315720411
- CROSBY 21-12 1 1 2315720401
- CROSBY 22-12 1 1 2300520157
- CROSBY 25-12 1 1 2315720415
- CROSBY 30-12 1 1 2315720605
- CROSBY 31-12 1 1 2315722018
- CROSBY 41-12 1 1 2315720823

### Map

Tooltip:  On  Off

You can select, copy, and paste all of the below information into Excel or Word

### Details

#### Well Information

|      |              |            |                |      |                  |        |                |       |       |
|------|--------------|------------|----------------|------|------------------|--------|----------------|-------|-------|
| Name | Crosby 12-1H | API Well # | 23157220371000 | Type | OIL - Production | Status | PR - Producing | Field | HENRY |
|------|--------------|------------|----------------|------|------------------|--------|----------------|-------|-------|

General | Location | Images | Documents | Construction | Dates | Injection | Production | Permit | History | MIT

| Field                 | Pool   | Year | Month | Days | Method | Gravity | Oil  | Water | Gas  |
|-----------------------|--|------|-------|------|--------|---------|------|-------|------|
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 7     | 30   | P      | 45      | 4197 | 5574  | 3637 |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 6     | 30   | P      | 44      | 4092 | 4974  | 6462 |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 5     | 31   | P      | 44      | 4643 | 5685  | 5586 |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 4     | 29   | P      | 44      | 4414 | 4873  | 477  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 3     | 30   | P      | 25      | 4687 | 4951  | 3753 |

| Field                 | Pool   | Year | Month | Days | Method | Gravity | Oil   | Water | Gas   |
|-----------------------|--|------|-------|------|--------|---------|-------|-------|-------|
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 7     | 30   | P      | 45      | 4197  | 5574  | 3637  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 6     | 30   | P      | 44      | 4092  | 4974  | 6462  |
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| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 3     | 30   | P      | 25      | 4687  | 4951  | 3753  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 2     | 28   | P      | 44      | 6422  | 4716  | 5013  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2014 | 1     | 11   | P      | 42      | 2648  | 1633  | 2581  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 12    | 31   | P      | 42      | 5796  | 4454  | 4857  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 11    | 30   | P      | 42      | 6182  | 4481  | 4644  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 10    | 31   | P      | 43      | 7616  | 5050  | 4705  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 9     | 30   | P      | 41      | 9181  | 6151  | 6746  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 8     | 31   | F      | 42      | 10030 | 9089  | 6969  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 7     | 28   | P      | 45      | 7567  | 3891  | 4631  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 6     | 26   | F      | 46      | 9697  | 6221  | 7652  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 5     | 30   | F      | 44      | 13913 | 9525  | 9850  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 4     | 26   | F      | 44      | 15444 | 9571  | 9124  |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 3     | 31   | F      | 44      | 23696 | 13102 | 16641 |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 2     | 29   | F      | 44      | 26495 | 0     | 17258 |
| <a href="#">HENRY</a> | <a href="#">TUSCALOOSA MARINE SHALE OIL POOL</a> | 2013 | 1     | 1    | P      | 31      | 3     |       |       |

| Permit Number                 | Approved Date           |
|-------------------------------|-------------------------|
| <a href="#">2012-OPD-0264</a> | 5/24/2012<br>8:38:08 AM |

# Mississippi State Oil and Gas Board

Reporting

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### Search

Switch to Advanced Filter

1. Encana Find 2.

Encana Previous

3. Oil and Gas Operators (1 records)

4. ENCANA OIL & GAS (USA) INC.

### Map

Tooltip:  On  Off



### Details

#### Entity Information

|              |                             |        |        |               |     |
|--------------|-----------------------------|--------|--------|---------------|-----|
| Company Name | ENCANA OIL & GAS (USA) INC. | Status | Active | Parent Entity | N/A |
|--------------|-----------------------------|--------|--------|---------------|-----|

[General](#) [Roles](#) [Agents](#) [Employees](#) [Wells](#)

|         |                 |          |            |
|---------|-----------------|----------|------------|
| Address | 370 17th Street | Address2 | Suite 1700 |
| City    | Denver          | State    | CO         |
| Zip     | 80202           |          |            |

#### Communication

Type [Contact](#)

Phone

Development support provided by: the [U.S. Department of Energy](#), the [Ground Water Protection Council](#), [RCMS](#), [Coordinate Solutions](#), and [Virtual Engineering Solutions](#).

1. Type Operator Name
2. Click **Find**
3. Click to expand the **Oil and Gas Operators** list
4. Click Operator from list

Information about the Operator chosen above appears here at the bottom of the screen  
**Company Name, Status, Address**

# Mississippi State Oil and Gas Board

Reporting

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Search

Switch to Advanced Filter

Encana Find

Encana Previous

Oil and Gas Operators (1 records)

- ENCANA OIL & GAS (USA) INC.

Map

Tooltip:  On  Off

Details

### Entity Information

Company Name: ENCANA OIL & GAS (USA) INC. Status: Active Parent Entity: N/A

General Roles Agents Employees **Wells**

| Name                         | Number | Type             | Status              |
|------------------------------|--------|------------------|---------------------|
| <a href="#">Anderson 17H</a> | 1      | OIL - Production | PR - Producing      |
| <a href="#">Anderson 17H</a> | 2      | OIL - Production | PR - Producing      |
| <a href="#">Anderson 17H</a> | 3      | OIL - Production | PR - Producing      |
| <a href="#">Anderson 18H</a> | 1      | OIL - Production | PR - Producing      |
| <a href="#">Anderson 18H</a> | 3      | OIL - Production | EX - Expired Permit |
| <a href="#">Anderson 18H</a> | 2      | OIL - Production | EX - Expired Permit |

Development support provided by: the U.S. Department of Energy, the [Ground Water Protection Council](#), [ROOMS](#), [Coordinate Solutions](#), and [Virtual Engineering Solutions](#).

Click the **Wells** buttons for a list of the Operator's Wells:  
This display includes:  
**Name, Number of the Well, Type, Status**  
Each well name listed is an active link to that individual well

# Mississippi State Oil and Gas Board

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Click this button to get to STR search

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### Search

Switch to Full Text Search

|             |                                      |                                |
|-------------|--------------------------------------|--------------------------------|
| Field       | <input type="text"/>                 | <input type="text"/>           |
| County Name | <input type="text"/>                 | <input type="text"/>           |
| Well Status | <input type="text"/>                 | <input type="text"/>           |
| Well Type   | <input type="text"/>                 | <input type="text"/>           |
| API Number  | <input type="text"/>                 | <input type="text"/>           |
| Well Name   | <input type="text"/>                 | <input type="text"/>           |
| Section     | = Equ <input type="text" value="1"/> | <input type="text" value="1"/> |
| Township    | = Equ <input type="text" value="2"/> | <input type="text" value="2"/> |
| TownshipDir | = Equ <input type="text" value="N"/> | <input type="text" value="N"/> |
| Range       | = Equ <input type="text" value="1"/> | <input type="text" value="1"/> |
| RangeDir    | = Equ <input type="text" value="W"/> | <input type="text" value="W"/> |
| Operator    | <input type="text"/>                 | <input type="text"/>           |

Find

### Map

Tooltip:  On  Off

### Details

Hide/Details

Enter your Section, Township & Range information in these fields in this format Then Click **Find** NOTE - Use Surface Location Section for your entry here.

# M SOGB TMS Development Page

<http://www.ogb.state.ms.us/TMSDevelopment.html>



Below are production graphs and data for current operators of horizontally completed oil wells in the Tuscaloosa Marine Shale (TMS). The MSOGB will continue to update this data on a month to month basis as information becomes available from production reports submitted. The data is in a .xls Excel Spreadsheet format. If you do not have Microsoft Excel you can get a free Microsoft Excel Viewer [here](#) that will allow you to open Excel documents.

## TMS Oil Production vs Time

Note - The individual well graphs can be viewed using the color-coded tabs located at the bottom of the spreadsheet.

Graphs updated as of: September 12, 2014

To search for a specific company's wells visit [HERE](#) and click [HERE](#) for a How To Guide.

## ---TMS DEVELOPMENT GIS MAPS---

### Legend

[MS TMS AOI Boundary Map](#)

[MS TMS \(Wilkinson Co.\)](#)

[MS TMS \(Pike Co.\)](#)

[MS TMS \(Amite Co.\)](#)

Maps updated as of: September 12, 2014

\*\*\*The maps were created for the exclusive use of the MSOGB Board Staff. Unit boundaries and well locations are not considered exact and may vary slightly from the unit plats provided with the permit application. Consequently, the MSOGB does not warranty the accuracy of the maps in any way and does not make the GIS data used to create the maps available for public except in the format provided. If the GIS information becomes available for public use the MSOGB will update this page with instructions on how to obtain the data.\*\*\*

Please visit the following links for discussions and information on important TMS News:

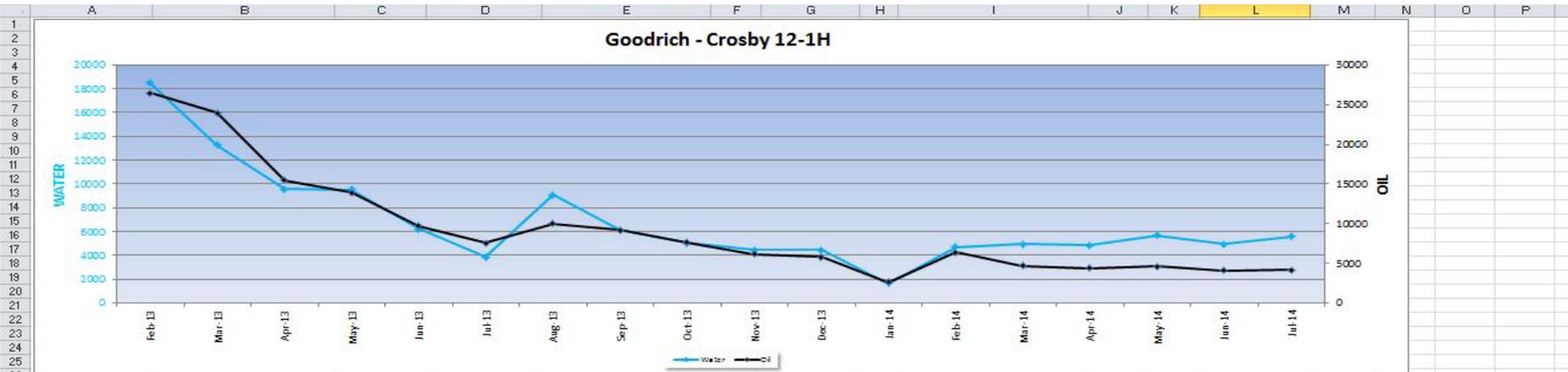
[Tuscaloosa Marine Shale \(TMS\)](#)

[Go Haynesville Shale](#)

MSOGB accepts no liability for the content expressed in the links provided, or for the consequences of any actions taken on the basis of the information provided. Any views or opinions presented in these links are solely those of the author and do not represent those of the MSOGB.

For questions concerning data and maps on this page please contact David Snodgrass by email at [dsnodgrass@ogb.state.ms.us](mailto:dsnodgrass@ogb.state.ms.us) or by phone at 601-576-4930.

# TMS Oil Production Vs. Time Spreadsheet – Crosby Data



**Crosby 12-1H #1**

API # 23-157-22037-1000  
 COUNTY: WILKINSON  
 SEC 1 & 12, T2N, R1W  
 FIELD: HENRY

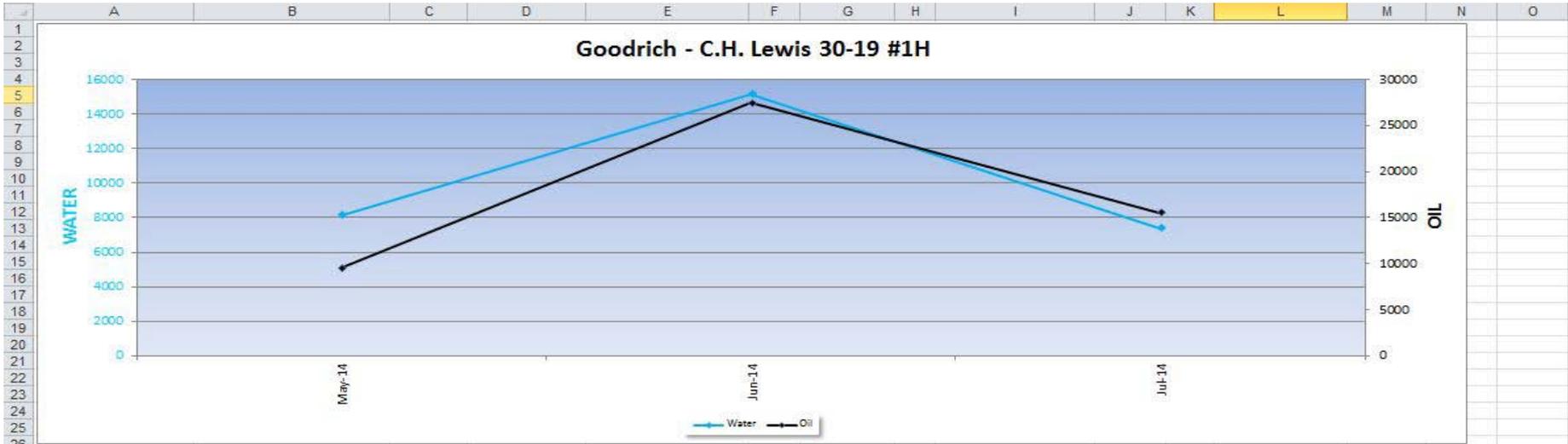
TYD = 11,723'      MD = 13,575'      Horizontal Length ~ 1,852'      7,500'

**TOTAL PRODUCTION: 167,000 bbls**      **DAYS PRODUCED: 510**

Test Date 2/7/2013      Oil 1174      Water --

| Pool | Month/YR | Days Produced | Oil   | Water | Avg. Daily Production (bbls) | Month to Month Change in Daily Production (%) |
|------|----------|---------------|-------|-------|------------------------------|---|
| TMS  | Jul-14   | 30            | 4197  | 5574  | 140                          | 2.57  |
| TMS  | Jun-14   | 30            | 4032  | 4974  | 136                          | -8.93   |
| TMS  | May-14   | 31            | 4643  | 5685  | 150                          | -1.60   |
| TMS  | Apr-14   | 29            | 4414  | 4873  | 152                          | -2.58   |
| TMS  | Mar-14   | 30            | 4687  | 4951  | 156                          | -31.88  |
| TMS  | Feb-14   | 28            | 6422  | 4716  | 229                          | -4.72   |
| TMS  | Jan-14   | 11            | 2648  | 1633  | 241                          | 28.75   |
| TMS  | Dec-13   | 31            | 5796  | 4454  | 187                          | -9.27   |
| TMS  | Nov-13   | 30            | 6182  | 4481  | 206                          | -16.12  |
| TMS  | Oct-13   | 31            | 7616  | 5050  | 246                          | -19.72  |
| TMS  | Sep-13   | 30            | 9181  | 6151  | 306                          | -5.41   |
| TMS  | Aug-13   | 31            | 10030 | 9089  | 324                          | 19.72   |
| TMS  | Jul-13   | 28            | 7567  | 3891  | 270                          | -27.54  |
| TMS  | Jun-13   | 26            | 9697  | 6221  | 373                          | -19.58  |
| TMS  | May-13   | 30            | 13913 | 9525  | 464                          | -21.92  |
| TMS  | Apr-13   | 26            | 15444 | 9571  | 594                          | -23.20  |
| TMS  | Mar-13   | 31            | 23976 | 13248 | 773                          | -21.18  |
| TMS  | Feb-13   | 27            | 26495 | 18453 | 981                          | --  |

# TMS Oil Production Vs. Time Spreadsheet – C H Lewis Data



|                      |           |                         |               |                          |       |                              |   |                       |  |           |  |
|----------------------|-----------|-------------------------|---------------|--------------------------|-------|------------------------------|---|-----------------------|--|-----------|--|
| C.H. LEWIS 30-19 #1H |           | API # 23-005-20789-1000 |               | TVD = 11,489'            |       | MD = 18,685'                 |   | Horizontal Length ~'  |  | 7,196'    |  |
|                      |           | COUNTY: AMITE           |               |                          |       |                              |   |                       |  |           |  |
|                      |           | SEC 30, 19, T2N, R6E    |               |                          |       |                              |   |                       |  |           |  |
|                      |           | FIELD: ALFRED C. MOORE  |               |                          |       |                              |   |                       |  |           |  |
|                      |           |                         |               | <b>TOTAL PRODUCTION:</b> |       | <b>52,505 bbls</b>           |   | <b>DAYS PRODUCED:</b> |  | <b>68</b> |  |
| 35                   | Test Date | Oil                     | Water         |                          |       |                              |   |                       |  |           |  |
| 36                   | 5/29/2014 | 1387                    | 792           |                          |       |                              |   |                       |  |           |  |
| 38                   |           |                         |               |                          |       | Avg. Daily Production (bbls) | Month to Month Change in Daily Production (%) |                       |  |           |  |
| 39                   | Pool      | Month/YR                | Days Produced | Oil                      | Water |                              |   |                       |  |           |  |
| 40                   | TMS       | Jul-14                  | 25            | 15524                    | 7393  | 621                          | -32.12  |                       |  |           |  |
| 41                   |           | Jun-14                  | 30            | 27445                    | 15169 | 915                          | 24.72   |                       |  |           |  |
| 42                   |           | May-14                  | 13            | 9536                     | 8156  | 734                          | --  |                       |  |           |  |

# MSOGB TMS Development Page – Wilkinson Map

[http://www.ogb.state.ms.us/docs/tms/MS%20TMS%20\(Wilkinson%20Co.\).pdf](http://www.ogb.state.ms.us/docs/tms/MS%20TMS%20(Wilkinson%20Co.).pdf)

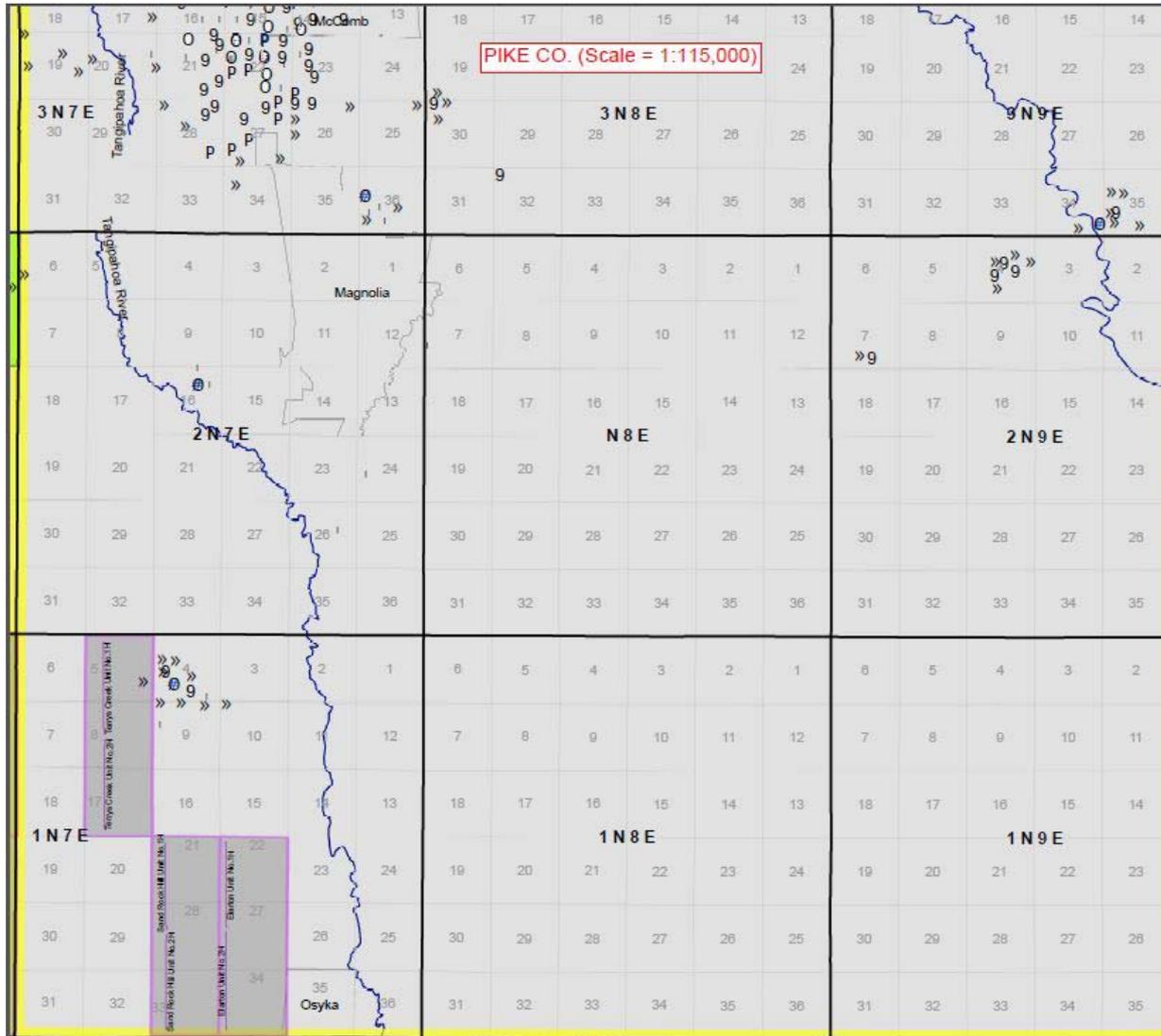


ARPENT ENERGY  
New Orleans, LA



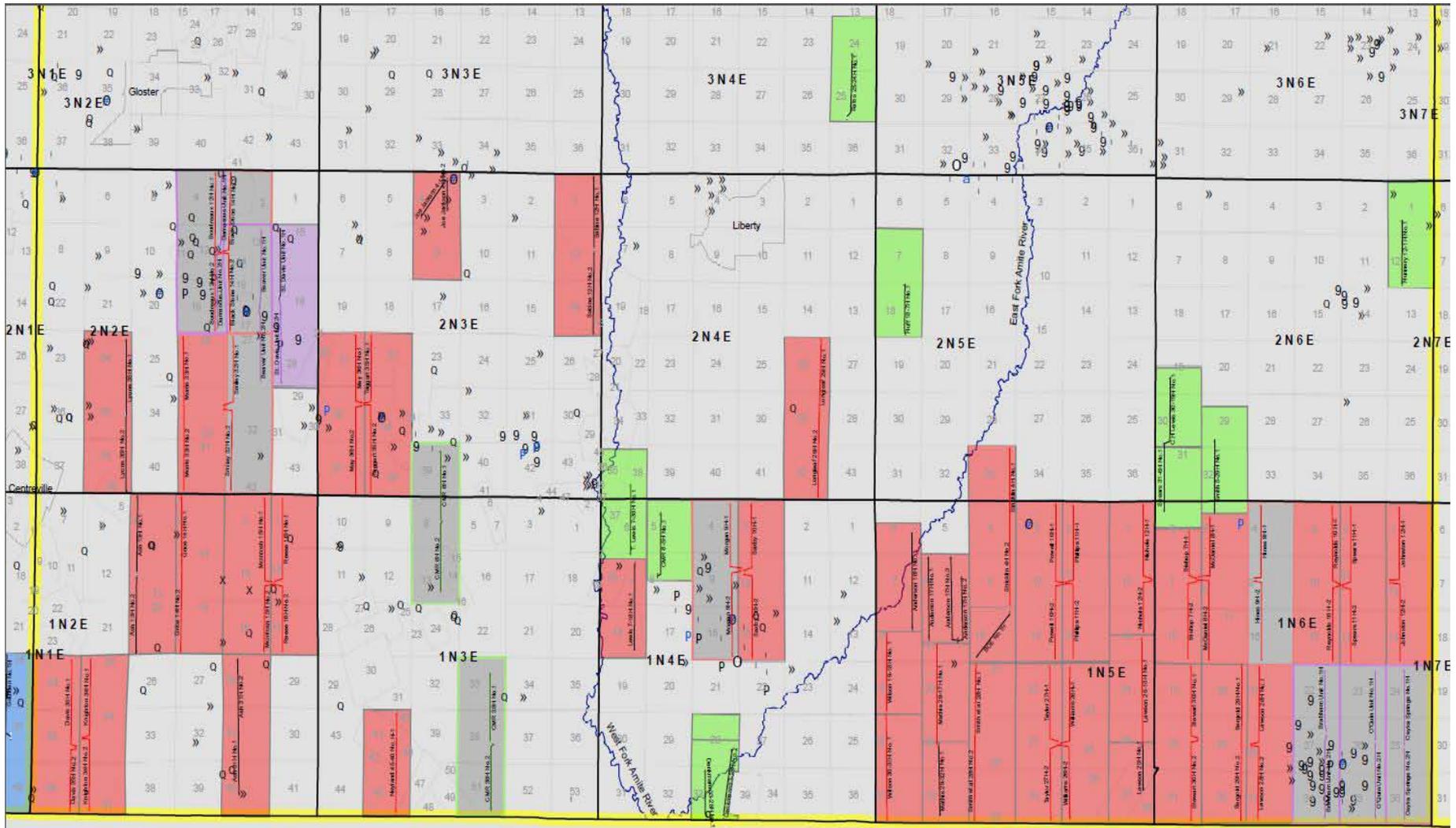
# M SOGB TMS Development Page – Pike Map

[http://www.ogb.state.ms.us/docs/tms/MS%20TMS%20\(Pike%20Co.\).pdf](http://www.ogb.state.ms.us/docs/tms/MS%20TMS%20(Pike%20Co.).pdf)



# M SOGB TMS Development Page – Amite Map

[http://www.ogb.state.ms.us/docs/tms/MS%20TMS%20\(Amite%20Co.\).pdf](http://www.ogb.state.ms.us/docs/tms/MS%20TMS%20(Amite%20Co.).pdf)



# Go Haynesville Shale Home Page

<http://www.gohaynesvilleshale.com/>



Our Network: [WeeklyShale.com](#) [GoHaynesvilleShale](#) [GoMarcellusShale](#) [EagleFordForum](#) Follow: [E](#) [in](#) [f](#) Search [GoHaynesvilleShale.cc](#) Search



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### Tuscaloosa Marine Shale



Discuss the TMS

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Started by Preston J. Dugas III in [Shale Related Topics](#). Last reply by HBP, 13 hours ago.  
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Started by Skip Peel - Independent Landman in [Shale Related Topics](#). Last reply by Skip Peel - Independent Landman 14 hours ago.  
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Started by Ken Boone in [Shale Related Topics](#) 18 hours ago.  
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# Goodrich Petroleum Corporation Management Presentation

[www.goodrichpetroleum.com/presentations/MgmtCurrent.pdf](http://www.goodrichpetroleum.com/presentations/MgmtCurrent.pdf)

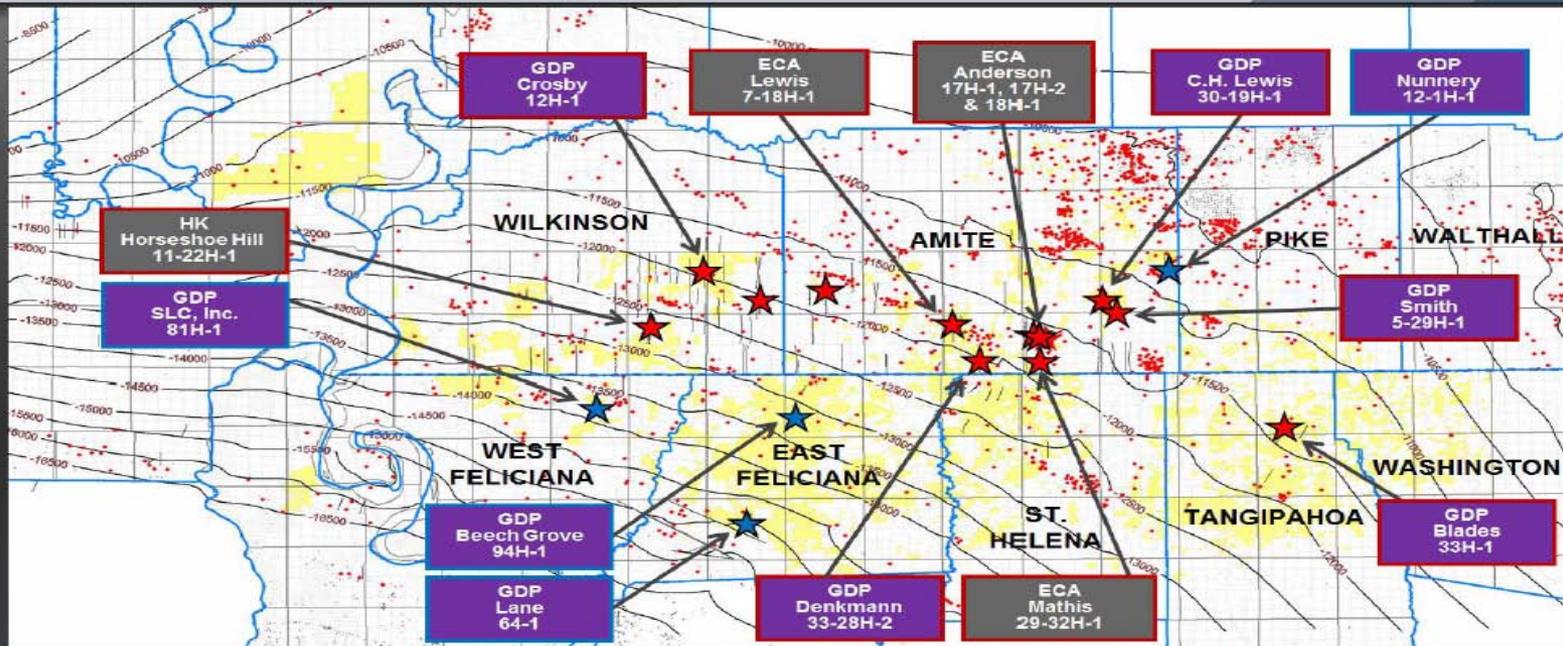
# Goodrich Petroleum Corporation Management Presentation



## TUSCALOOSA MARINE SHALE



### Well Control & Structure Map 500' Contour



- Red well markings represent approximately 1,350 vertical penetrations through the TMS
- Red stars represent wells with IP 1,000+ Boe/day
- 90% of acreage at -14,000' TVD or shallower, where most wells have been completed to date
- Nunnery is the most up-dip (-10,825' SS TVD; 17,550' MD; 5,450' horizontal)
- SLC is the deepest optimally completed well drilled to date (-13,809' SS TVD; 21,450' MD; 7,000' horizontal)
- Lane 64-1 is deepest well (non-optimized) drilled to date (vertical)

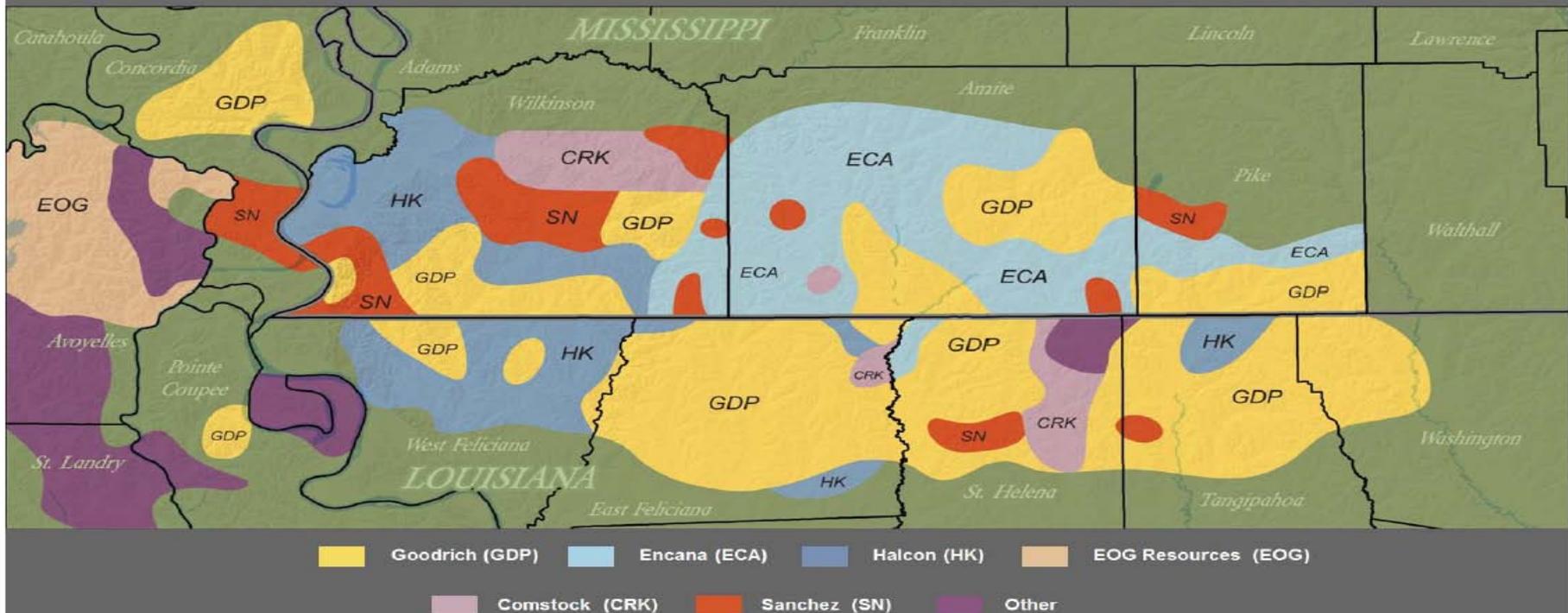
# Goodrich Petroleum Corporation Management Presentation



## TUSCALOOSA MARINE SHALE



### Core Acreage Position & Operators

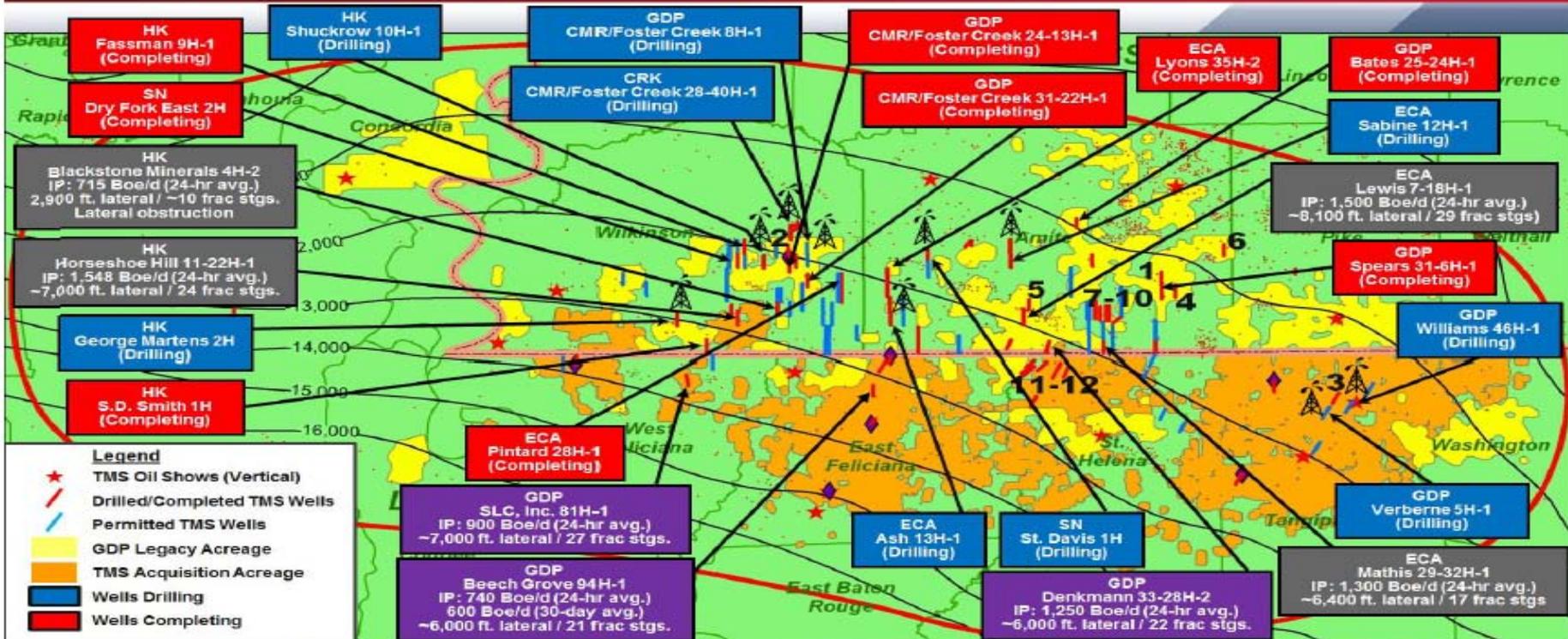


Note: Internal estimates of approximate operator concentration / ownership, based on publicly available information.

# Goodrich Petroleum Corporation Management Presentation



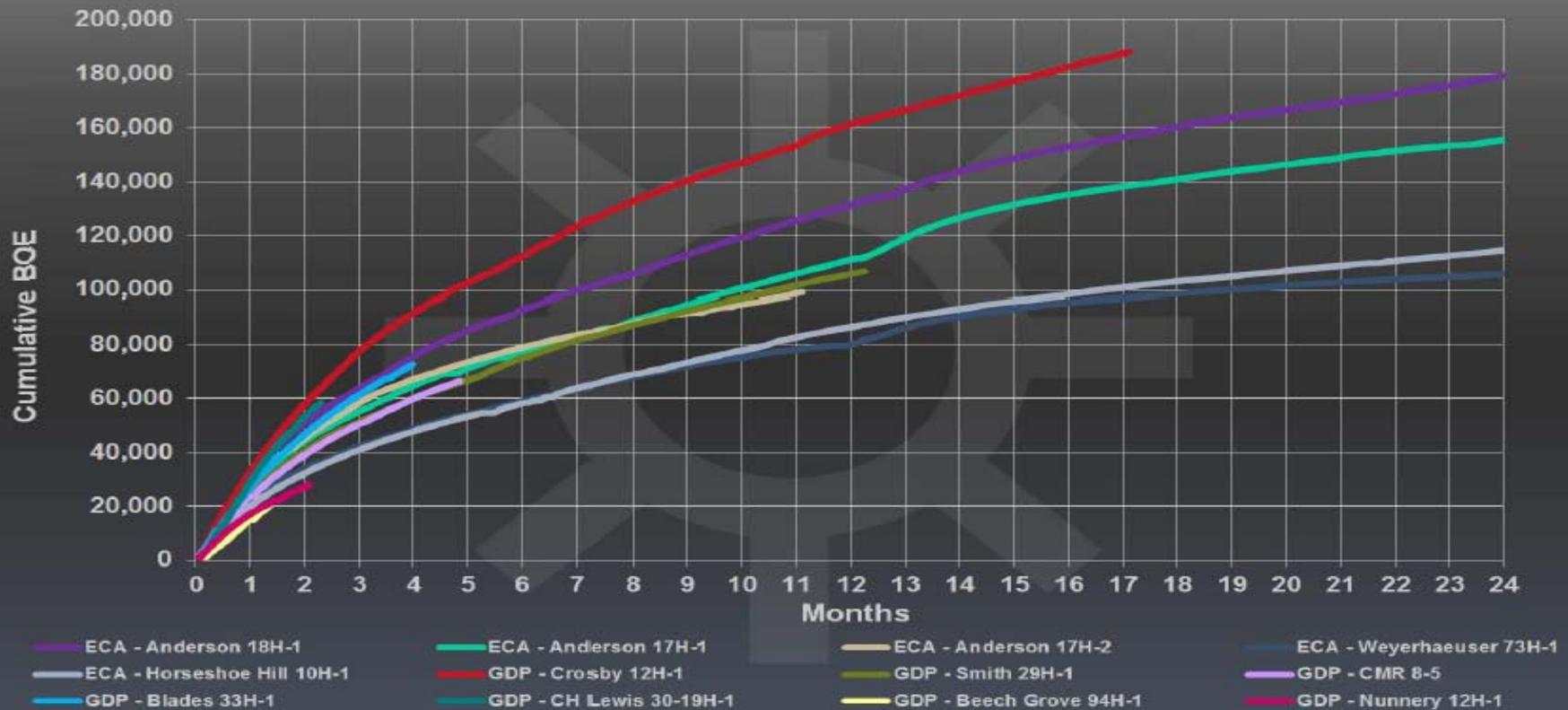
## TUSCALOOSA MARINE SHALE



# Goodrich Petroleum Corporation Management Presentation



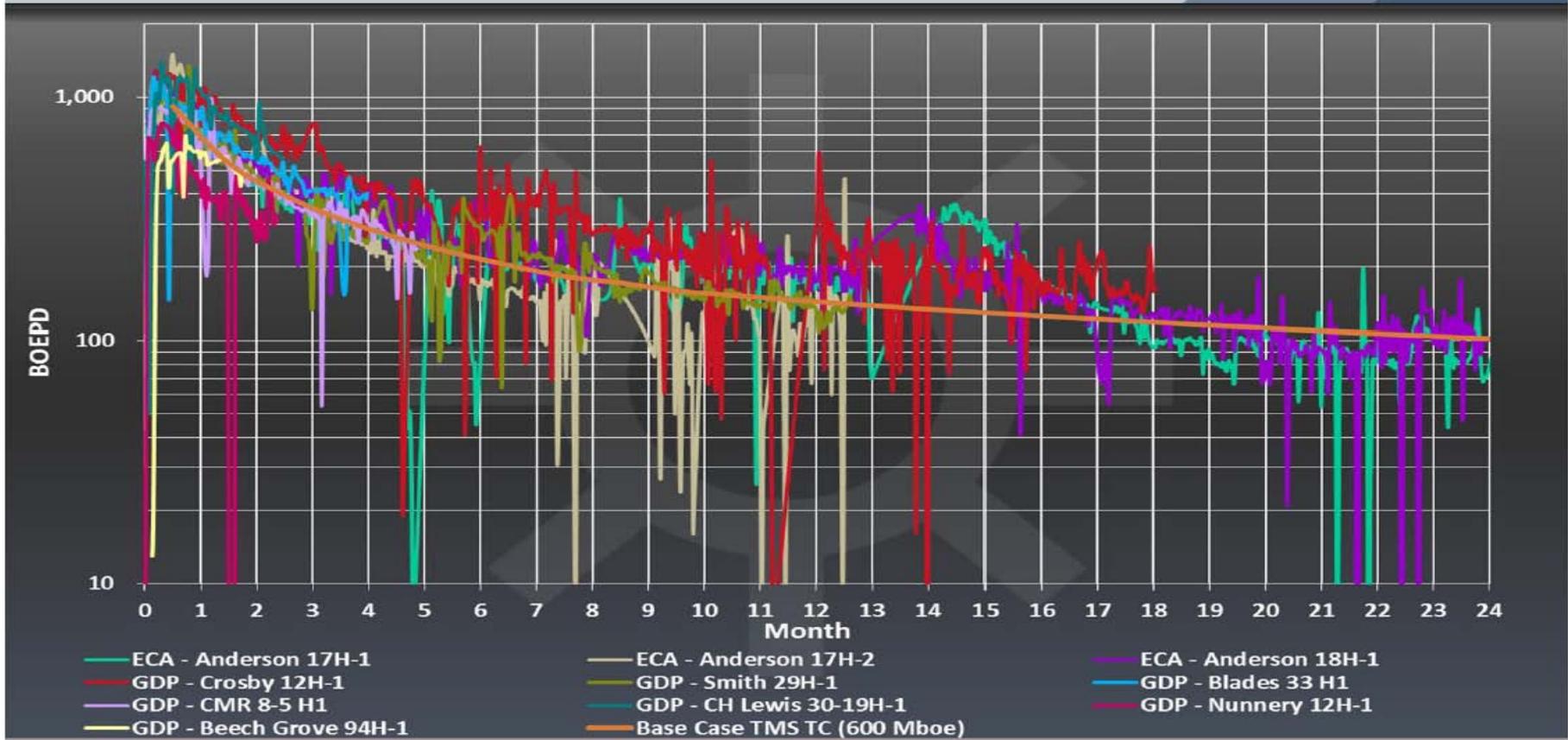
## TMS CUMULATIVE PRODUCTION



# Goodrich Petroleum Corporation Management Presentation



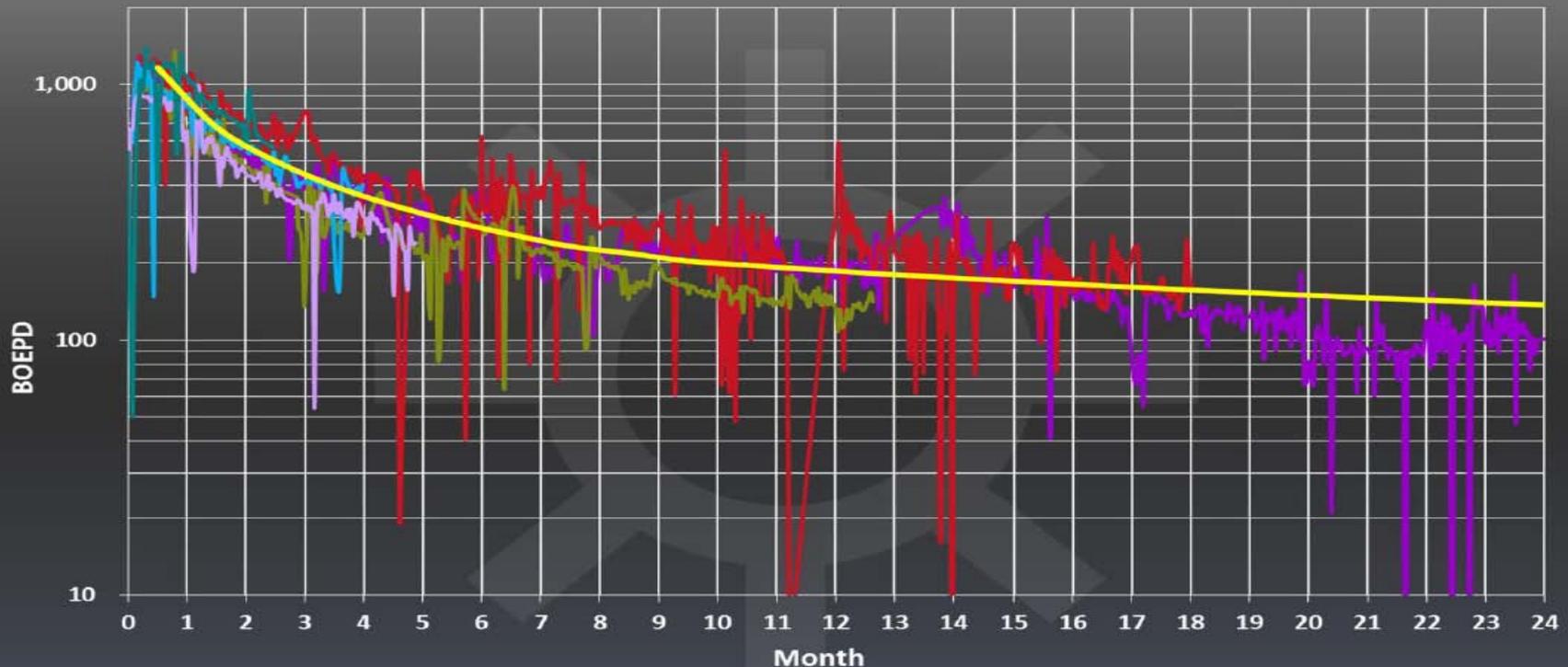
## TMS BASE CASE TYPE CURVE (600 MBOE)



# Goodrich Petroleum Corporation Management Presentation



## TMS HIGH CASE TYPE CURVE (800 MBOE)



ECA - Anderson 18H-1

GDP - Crosby 12H-1

GDP - Smith 29H-1

GDP - Blades 33 H1

GDP - CMR 8-5 H1

GDP - CH Lewis 30-19H-1

High Case TMS TC (800 Mboe)

# Goodrich Petroleum Corporation Management Presentation



## TMS WELL ECONOMIC SUMMARY



|  | Single Well Pad                       | Two Well Pad                          | Multi Well Pad                        |
|--|---------------------------------------|---------------------------------------|---------------------------------------|
| Well Cost:                                   | \$13.0 MM                             | \$11.5 MM                             | \$10.0 MM                             |
| Lateral Length:                              | 6,000'                                | 6,000'                                | 6,000'                                |
| Frac Stages:                                 | 22                                    | 22                                    | 22                                    |
| Royalty Burden:                              | 20%                                   | 20%                                   | 20%                                   |
| Severance Tax:                               | 0% until Payout<br>12.5% after Payout | 0% until Payout<br>12.5% after Payout | 0% until Payout<br>12.5% after Payout |
| Reserves (Gross):                            | 600 MBOE / 800 MBOE                   | 700 MBOE (Mid Case)                   | 600 MBOE / 800 MBOE                   |
| Reserves (Net):                              | 480 MBOE / 640 MBOE                   | 560 MBOE                              | 480 MBOE / 640 MBOE                   |
| F&D Cost (\$/BOE):                           | \$27.08 / \$20.31                     | \$20.54                               | \$20.83 / \$15.63                     |
| IRR: (@ \$95 NYMEX)                          | 29% / 56%                             | 53%                                   | 56% / 111%                            |
| NPV:   | \$6.1 MM / \$12.5 MM                  | \$9.9 MM                              | \$8.9 MM / \$15.0 MM                  |
| Undiscounted Payback (Years): (@ \$95 NYMEX) | 2.9 / 1.7                             | 1.7                                   | 1.7 / 1.0                             |

# Goodrich Petroleum Corporation Management Presentation



## CONCLUSIONS



### Challenges & Solutions for Drilling in the TMS

#### Drilling & Completion Best Practices

- **Drilling:** proper rigs with experienced crews; bit selection; chemicals; mud weight; intermediate casing depth; BHA & bit selection for building angle faster
- **Completion:** lower TMS lateral placement; composite frac plugs; reverting back to coil tubing for plug drill out

#### Consistent & Repeatable Production Results

- **GDP:** Crosby; Smith; CMR; Blades; C.H. Lewis; Nunnery; Beech Grove & SLC
- **Non-Operated:** Anderson wells; Horseshoe Hill; Mathis & Lewis
- Ample takeaway capacity (pipe, rail & barge) with LLS pricing

#### Cost Reduction Opportunities & Enhanced Economics

- **Drilling Efficiencies:** continuity of rigs with experienced crews; rig, bit, motor & fluid selection; enhanced directional drilling technologies
- **Pad Drilling & Zipper Fracing:** fewer rig mobs; single mud system change out; reduction of equipment standby time; shared production facilities
- **Service Cost Competition:** less sourcing from other basins; more competitive bidding; lower frac cost pricing over time
- **Eagle Ford Shale Experience:** reduced drilling & completions costs ~40% (\$3.8MM per well) in just two years

The Encana logo consists of the word "encana" in a blue, lowercase, sans-serif font, followed by a registered trademark symbol (®). Below the text is a stylized arc that is blue on the left and right sides and transitions to a light green in the center.

encana®

# Encana Resources Management Presentation

[www.encana.com/pdf/investors/presentations-events/corporate-presentation.pdf](http://www.encana.com/pdf/investors/presentations-events/corporate-presentation.pdf)

# Encana Resources Management Presentation



## Tuscaloosa Marine Shale



### July 2014 update

---

- Demonstrating achievement of type curve across Tier 1 acreage
  - Wells drilled YTD 2014 generally meeting normalized type curve expectations
- Cost improvements continue to be achieved
  - Mathis and Lewis wells demonstrated record drilling times
  - Progressing well completion design
- Plan to complete appraisal of play by year-end
- 6 net (10 gross) wells drilled YTD as of June 30<sup>th</sup>
- 2 rigs currently running

# Encana Resources Management Presentation



## Tuscaloosa Marine Shale

MASSIVE OIL RESOURCE, IDEAL FOR EXECUTION AT SCALE

encana

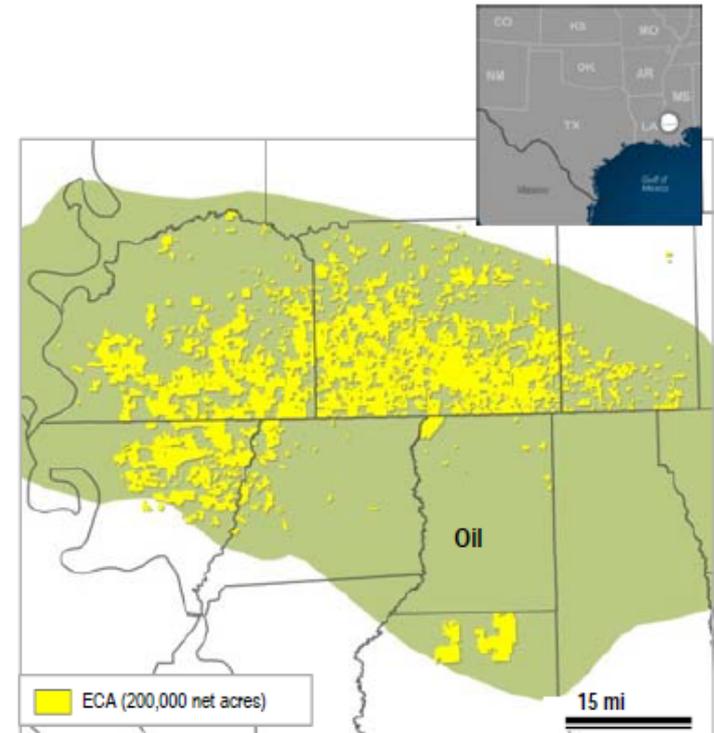
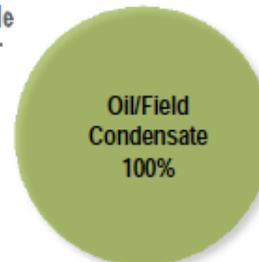
### Why we like it

- Emerging oil asset with massive upside potential
  - Estimated 4 - 5 BBoe of PIIP
  - Potential to produce >50,000 bbls/d
- ~80% of Encana's 200k net acres is Tier 1 land
- Demonstrating achievement of type curve across Tier 1 acreage
  - 7 of 10 last industry wells meeting normalized type curve ( ECA 7 for 7)
- LLS pricing advantage
- Favorable regulatory environment
- 35% - 40% rate of return\* in Resource Play Hub mode

### 2014 plan

- Complete appraisal
  - Demonstrate repeatability of type curve
  - Continue to improve costs
- Further delineate Tier 1 acreage

### TMS 2017 Production



\*Based on type curve & assumes flat pricing to 2017 of \$4/MMBtu NYMEX, \$90/bbl WTI.

# Encana Resources Management Presentation



## Tuscaloosa Marine Shale KEY STATISTICS



|                          |                     |
|--------------------------|---------------------|
| Land (net acres)         | 200,000             |
| Average working interest | 60%                 |
| RPH type curve EUR/well  | 650-750 MBoe        |
| RPH type curve ROR       | 35% – 40%           |
| Well inventory (gross)   | 1,000               |
| RPH well costs (DCT)     | \$11 – \$13 million |
| Royalty rate             | 20%                 |
| 2014F Production (net)   |                     |
| Oil/field Condensate     | 1,600-2,100         |
| NGLs                     | -                   |
| Natural gas              | -                   |
| 2014F Capital (net)      | \$110 – \$125       |
| 2014F Wells (net)        | 12 – 14             |
| 2014F rigs               | 2                   |
| Supply cost*             | \$45 – \$55/boe     |

---

\*Supply Cost is defined as the flat NYMEX/WTI price that yields an IRR of 9% and does not include land or G&A costs. RPH = Resource Play Hub.



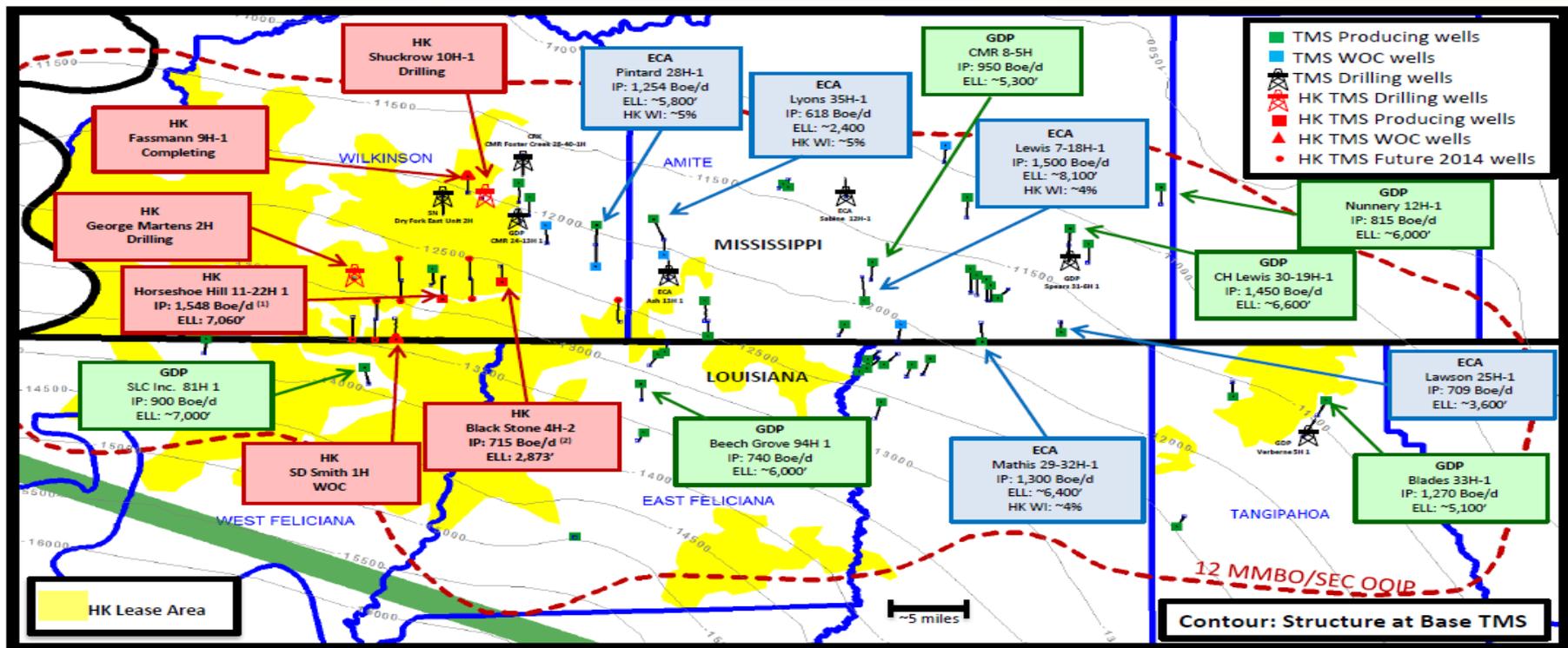
# **Halcon Resources Management Presentation**

**[http://files.shareholder.com/downloads/ABEA-5X1N65/3235854946x0x779046/5d4253d0-351a-4926-9895-8beeaf2b62c/Halcon\\_IR%20Presentation\\_Barclays\\_vFINAL.pdf](http://files.shareholder.com/downloads/ABEA-5X1N65/3235854946x0x779046/5d4253d0-351a-4926-9895-8beeaf2b62c/Halcon_IR%20Presentation_Barclays_vFINAL.pdf)**

# Halcon Resources Management Presentation



## TMS 2014 Activity Map



Source: Company investor presentations and publicly available information.

IP rates are 24 hour rates unless noted differently.

ELL = Effective Lateral Length.

(1) 1,208 Boe/d and 1.1 MMcf/d natural gas; assuming full ethane recovery, total IP rate 1,548 Boe/d.

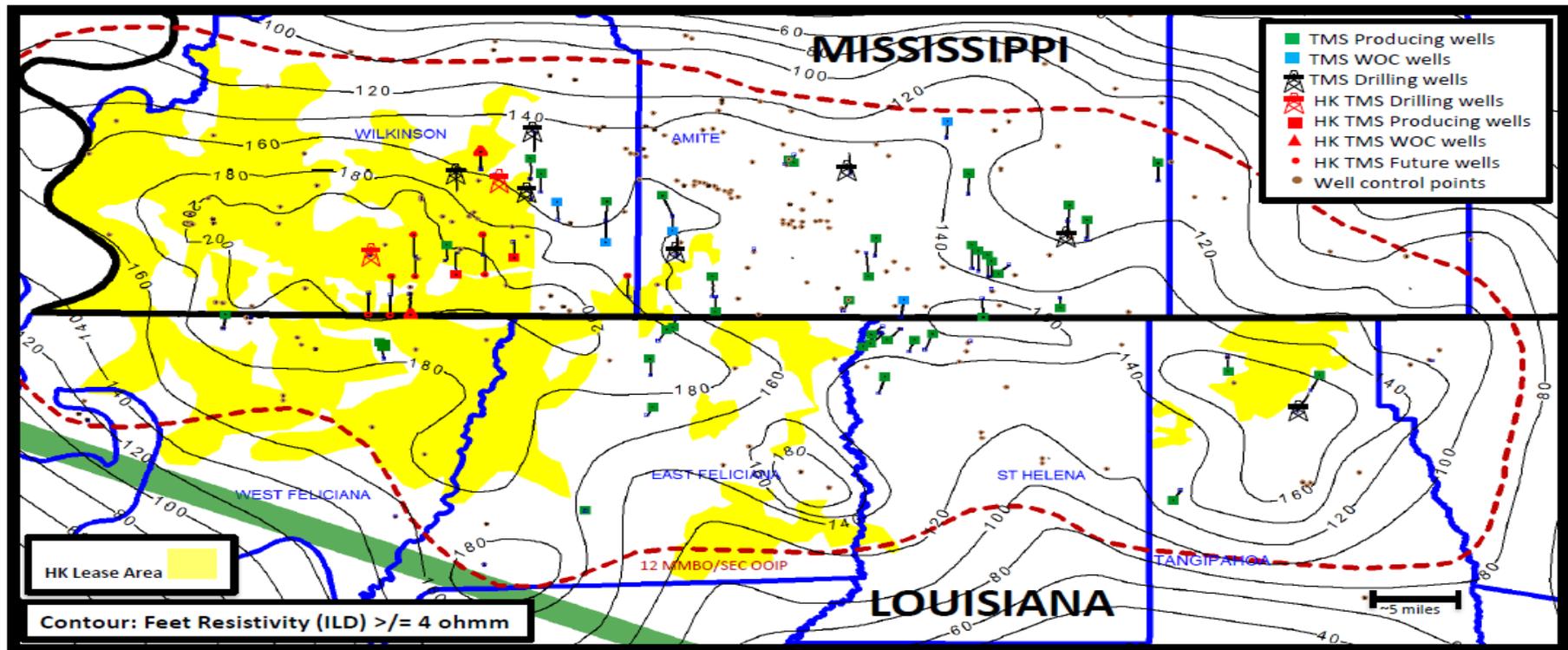
(2) 553 Boe/d and 0.5 MMcf/d natural gas; assuming full ethane recovery, total IP rate 715 Boe/d.

# Halcon Resources Management Presentation



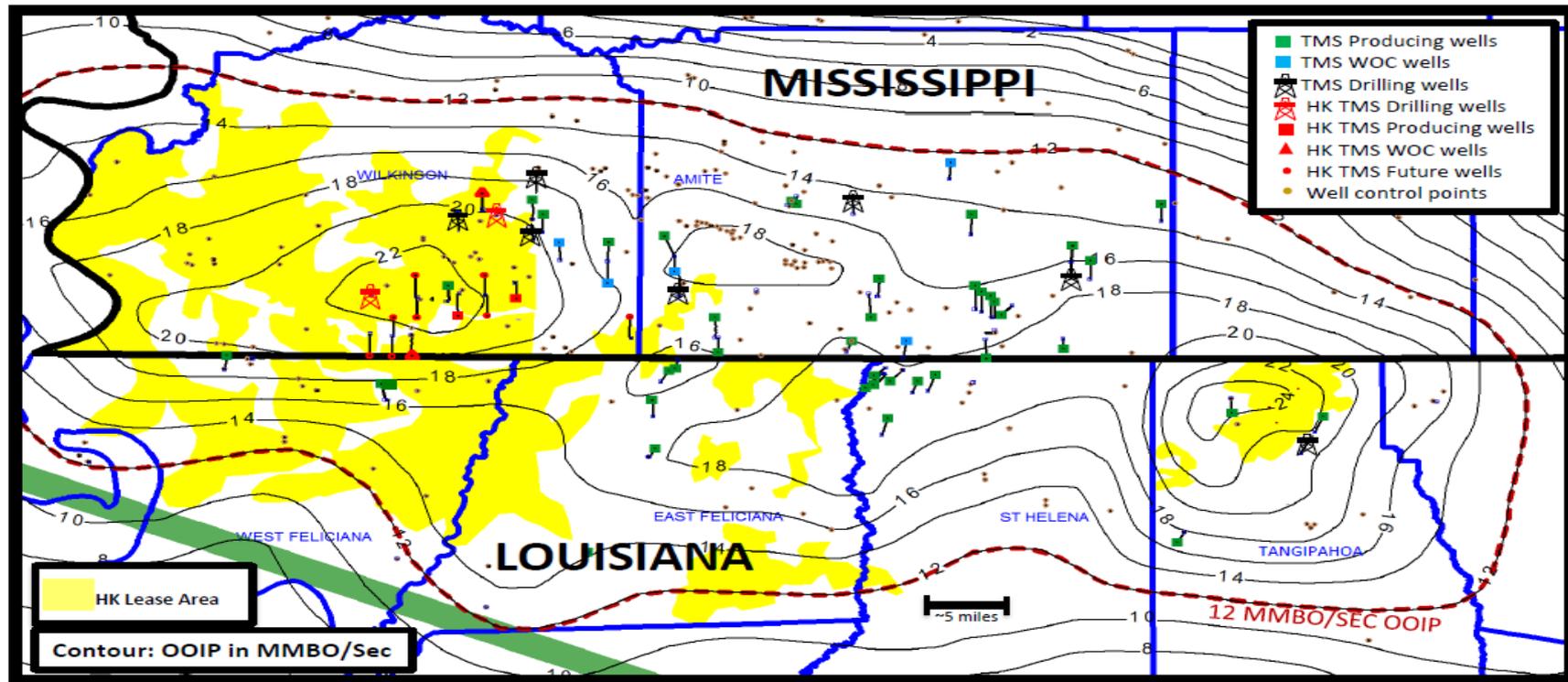
## TMS Geology

Lower TMS Resistivity (ILD) Response  $\geq 4$  ohmm



# Halcon Resources Management Presentation

## OOIP in MMBO/Sec – The Oil is There! Lower TMS



# Halcon Resources Management Presentation



## TMS Performance Road Map

### Drilling

Continue to  
improve  
performance

- Days to TD being reduced
- Better defined drilling targets
- Improved geosteering controls increased rate of penetration (ROP)

### Completions

Fine tune frac recipe

- Generating higher stimulated rock volumes
- Pumping higher proppant volumes
- Improving treating protocols

### Rock Quality Assessment

Analysis underway

- Participating in SLB consortium focused on formation assessment
- Reviewing available 2-D seismic across the trend
- Started permitting for 336 sq. mile 3-D seismic survey in Wilkinson County, MS



# Comstock Resources Management Presentation

<http://phx.corporate-ir.net/phoenix.zhtml?c=101568&p=irol-presentations>

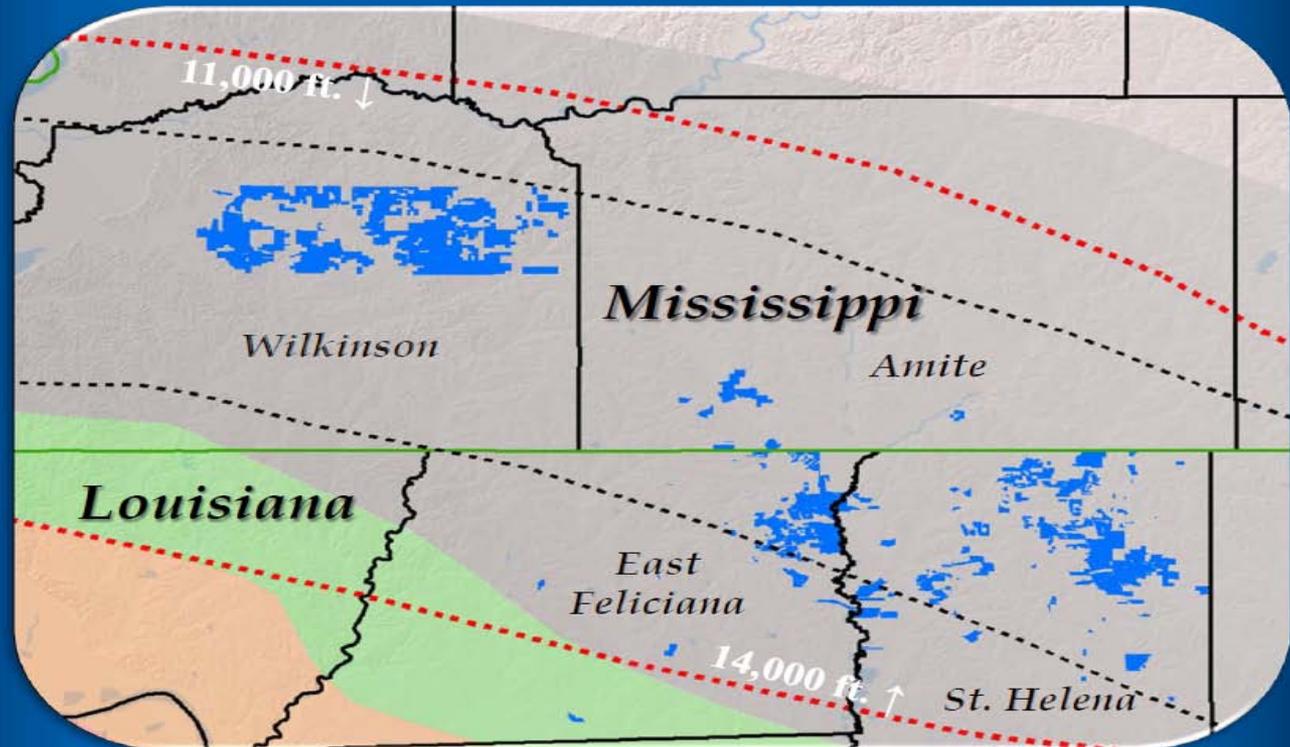
# Comstock Resources Management Presentation



COMSTOCK  
RESOURCES

## TMS Acreage

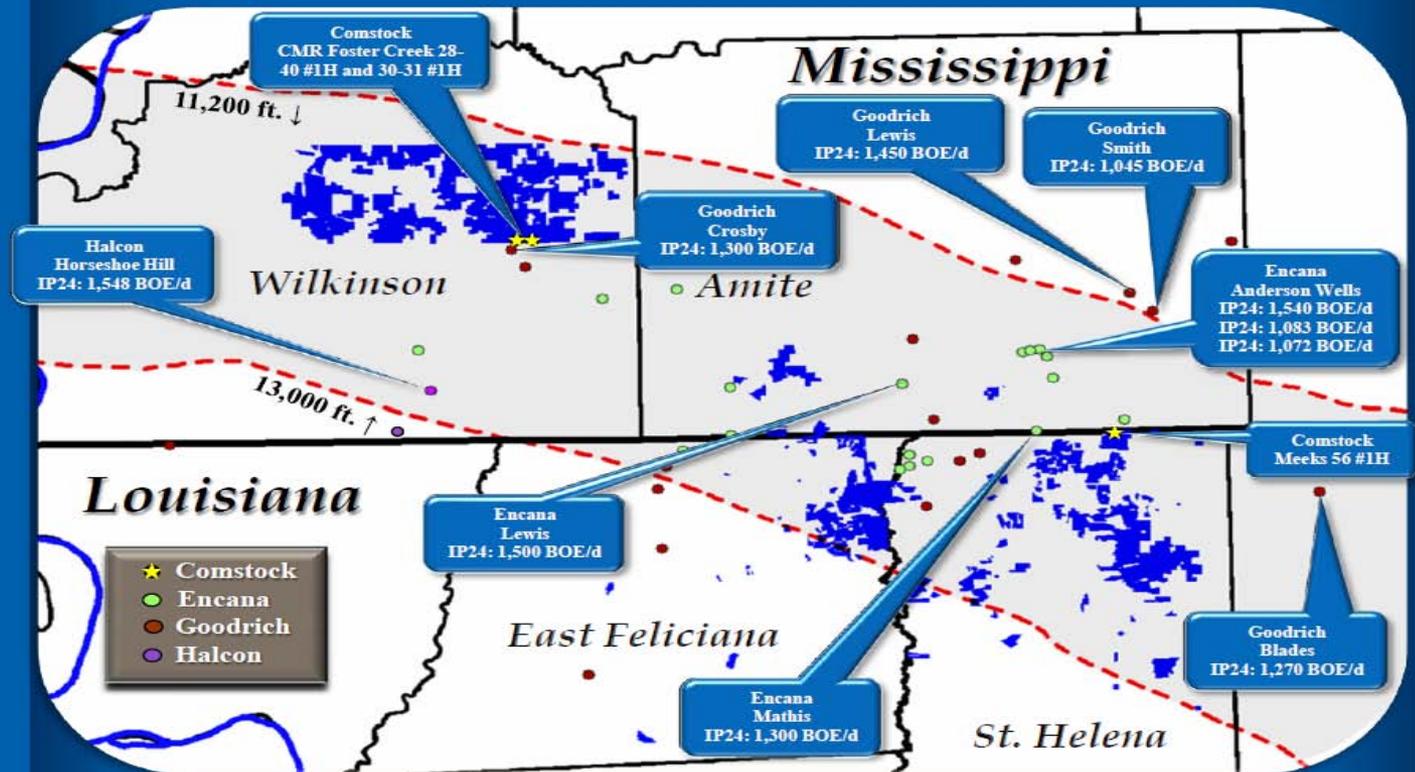
*60,800 gross acres (58,100 net) prospective for oil in the  
Tuscaloosa Marine shale in Louisiana and Mississippi*



# Comstock Resources Management Presentation

## TMS Activity

### Producing Wells





# **Sanchez Energy Corporation Management Presentation**

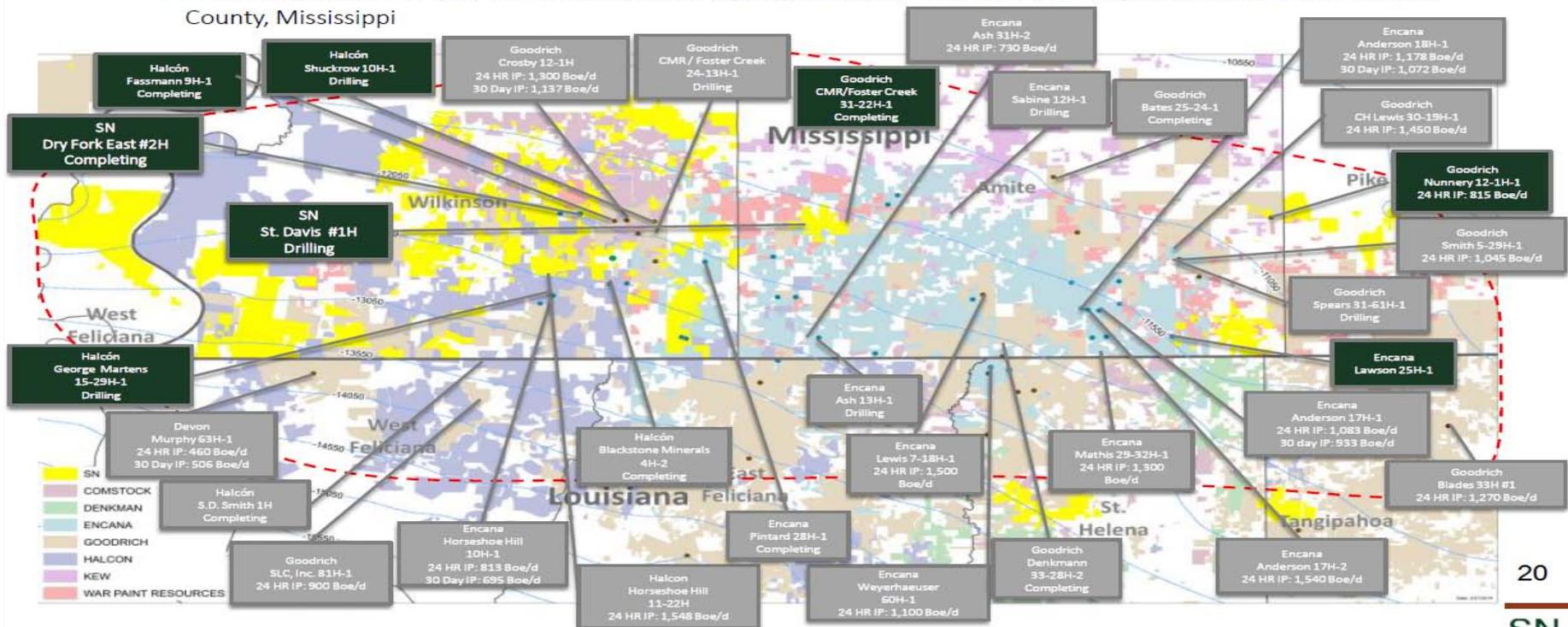
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# Sanchez Energy Corporation Management Presentation



## TMS Acreage Position and Activity

- ◆ ~59,000 net acre position in the core of the TMS
  - ❖ Contiguous blocky acreage with 3+ years of average remaining lease term
- ◆ SN anticipates spudding up to 4 gross (2 net) operated wells including participating in 10 – 15 gross non-operated wells with working interests ranging from 1% - 25%
  - ❖ First SN operated well (Dry Fork East #2) is undergoing completion. Currently drilling St. Davis Unit #1H in Amite County, Mississippi



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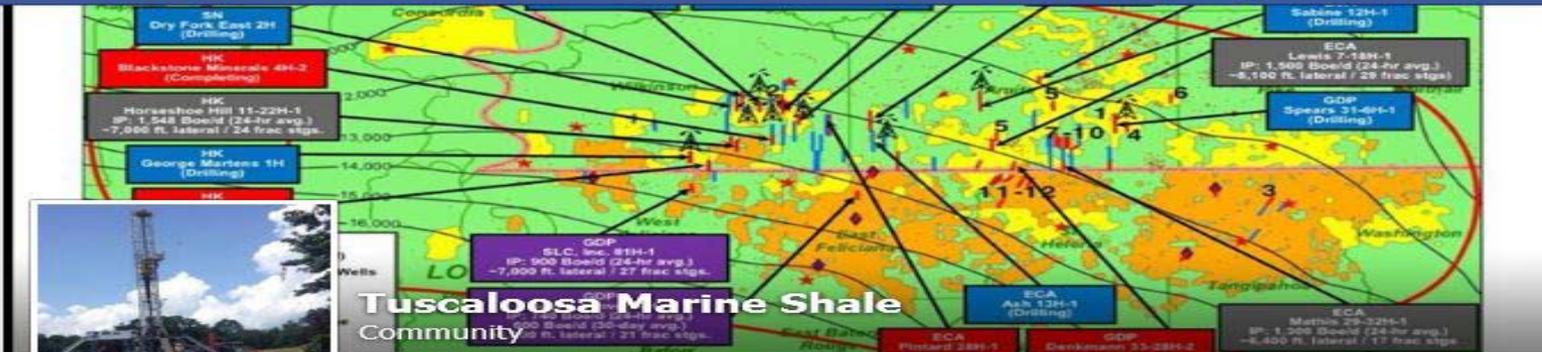
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THE DEFINITIVE SOURCE ON THE TMS OIL PLAY

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Welcome to the new and improved TMSHorizons.com! We are excited about our new site and our BIG plans for it moving forward. Check back regularly for updated content and news. Please [contact us](#) to let us know what you think about our new look. Also, feel free to share any suggestions you have for the site!

### The latest from the TMS

- [Daily Report - 9-24-2014](#)
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- [Proposed TMS Policy Changes](#)
- [Williams 46H-1](#)
- [Creek Cottage East/West Getting Started](#)
- [September Docket - Final is Now Posted](#)
- [Daily Report 9-22-2014](#)
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TMS News from around the web

[Encana Cash Puts Halcon to Penn Virginia in Play: Real M&A - Businessweek](#)  
September 23rd

### From the field:



OMFL\_Foster\_Creek\_81-02H-1\_Nabors\_X-17\_Rig  
For more pictures of TMS activity, visit our [gallery](#).

### About Us

TMS Horizons LLC is a locally owned and operated website that is dedicated to serving the Tuscaloosa Marine Shale Oil Play (TMS). Our Facebook page and website reach thousands of people per week. TMS Horizons LLC is the resource for oil drillers and operators, listing the necessary provisions supplied by oil service personnel/businesses. We provide mineral listings to ensure that mineral owners get the best price for leasing or selling their minerals. Also, we offer a resource for realtors/RV park owners to connect with the influx of workers for housing needs.

Thank you for supporting our website and helping us promote the success of the TMS.

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Chad Lindsey  
Financial Advisor

# TMS Horizons Minerals Page

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If you are a TMS mineral owner and you have ever considered selling all, or a portion of your mineral rights or royalty interests, consider allowing us to assist you in the process. Feel free to email us at: [tmshorizons@gmail.com](mailto:tmshorizons@gmail.com) with any questions or concerns regarding your interests.

TMSHorizons will market your interests, negotiate an agreement, and close the transaction all for a limited cost(s) to you, the seller. Even if you are not certain you are interested in selling your interest - allow us to advise you on your options with respect to selling or leasing your interests.

TMSHorizons has developed numerous relationships with investors within the oil and gas industry who will offer a fair price for your interests. We only work with quality companies who have withstood the test of time.

Finally, even if you have already received an offer, send it to [tmshorizons@gmail.com](mailto:tmshorizons@gmail.com) and we will evaluate the offer, advise you as to the equity and legitimacy of the offer and perhaps solicit a better deal for you.

For more information on how to get started, please [contact us](#).

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# MISSISSIPPI - FORCE POOLING - §53-3-7

## § 53-3-7. INTEGRATION OF INTERESTS; POOLING AGREEMENTS AND ORDERS.

(1)(a) When two (2) or more separately owned tracts of land are embraced within an established drilling unit, or when there are separately owned interests in all or part of an established drilling unit, the persons owning the drilling rights therein and the rights to share in the production therefrom may validly agree to integrate their interests and to develop their lands as a drilling unit. Where, however, such persons have not agreed to integrate their interests, the board may, for the prevention of waste or to avoid the drilling of unnecessary wells, require such persons to integrate their interests and to develop their lands as a drilling unit. All orders requiring such pooling shall be made after notice and hearing, and shall be upon terms and conditions that are just and reasonable, and will afford to the owner of each tract the opportunity to recover or receive his just and equitable share of the oil and gas in the pool without unnecessary expense.

The portion of the production allocated to the owner of each tract included in a drilling unit formed by a pooling order shall, when produced, be considered as if it had been produced from such tract by a well drilled thereon.

(b) Except as otherwise provided for in this section, in the event such pooling is required, the cost of development and operation of the pooled unit chargeable by the operator to the other interested owner or owners shall be limited to the actual expenditures required for such purpose, not in excess of what are reasonable, including a reasonable charge for supervision. In the event that the operator elects to proceed under the provisions of this subsection (1)(b), and does not elect to seek alternate charges as provided for in this section, the notice procedure followed shall be in accordance with Section 53 1 21, Mississippi Code of 1972.

**SIMPLE  
INTEGRATION**

(c) For the purposes of this section, as to a drilling unit, the term "nonconsenting owner" shall mean an owner of drilling rights which the owner has not agreed, in writing, to integrate in the drilling unit. The owner may own other drilling rights in the unit which the owner has agreed, in writing, to integrate in the unit and thereby also be a "consenting owner" as to the interest which the owner has agreed to integrate in the unit.

**ALTERNATE  
CHARGES**

(2)(a) In the event that one or more owners owning not less than thirty three percent (33%) of the drilling rights in a drilling unit has voluntarily consent to the drilling of a unit well thereon, and the operator has made a good faith effort to (i) negotiate with each nonconsenting owner to have said owner's interest

**INTEGRATION**

voluntarily integrated into the unit, (ii) notify each nonconsenting owner of the names of all owners of drilling rights who have agreed to integrate any interests in the unit, (iii) ascertain the address of each nonconsenting owner, (iv) give each nonconsenting owner written notice of the proposed operation, specifying the work to be performed, the location, proposed depth, objective formation, and the estimated cost of the proposed operation, and (v) offer each nonconsenting owner the opportunity to lease or farm out on reasonable terms, or to participate in the cost and risk of developing and operating the unit well involved, on reasonable terms, by agreeing in writing, then the operator may petition the board to allow it to charge alternate charges (alternate to and in lieu of the charges provided for in subsection (1)(b) of this section).

## INTEGRATION

(b) Any such petition on which alternate charges may be ordered by the board shall include a statement which shall name all nonconsenting real parties in interest in said proposed drilling unit, as of a date not more than ninety (90) days prior to the filing of the petition, giving each such person's name, and address if known; and if any owner's address is not known, the operator shall state in its petition that such person's address is unknown after diligent search and inquiry. Only those parties served with actual or constructive notice as set forth hereinbelow will be subject to any alternate charges allowed by the board.

(c) Upon the filing of a petition on which alternate charges may be ordered, the petitioner shall have prepared, and furnish to the board with said petition, a notice to each and all nonconsenting real parties in interest whose address is unknown, whether such person be a resident of the State of Mississippi or not, which the board shall have published, noticing each such person to appear before a regular meeting of the board sufficiently distant in time to allow thirty (30) days to elapse between the date of the last publication of said notice as hereinafter provided, and the date of the regular meeting of the board to which each such person is noticed. Said notice shall also notice all unknown heirs or devisees of deceased owners, if any there be, and all unknown persons owning drilling rights in said proposed drilling unit. The notice shall be substantially in the following form, to wit:

NOTICE TO APPEAR BEFORE THE

STATE OIL AND GAS BOARD

To \_\_\_\_\_ (inserting the name of such person or persons, whose address is unknown), and all such unknown heirs or devisees and all such unknown owners, whose names and addresses remain unknown after diligent search and inquiry.

You are noticed to appear before the State Oil and Gas Board at its regular \_\_\_\_\_ term, being on the \_\_\_ day of \_\_\_\_\_, 19\_\_ to show cause if any you can why the petition of \_\_\_\_\_ (Operator) being Petition No. \_\_\_\_\_ in said board and seeking to force integrate and pool all interests in (description of Unit by legal description) \_\_\_\_\_ should not be granted.

\_\_\_\_\_ (the time) Said meeting of said board shall be held at (the then hearing room of said Oil and Gas Board) on the above date at \_\_\_\_\_.

This \_\_\_\_\_ day of \_\_\_\_\_, A.D. \_\_\_\_\_.

\_\_\_\_\_  
Supervisor

(d) The publication of notice to nonconsenting real parties in interest whose address is unknown after diligent search and inquiry shall be made once in each week during three (3) successive weeks in a public newspaper of the county or counties in which the proposed drilling unit is located, if there be such a newspaper. If there is not such a county newspaper, then the said publication of notice shall be published in a newspaper having general circulation in the State of Mississippi. The period of publication shall be deemed to be completed at the end of twenty one (21) days from the date of the first publication, provided there have been three (3) publications made as hereinabove required.

**NOTICE  
REQUIREMENTS**

(e) Upon the filing of a petition on which alternate charges may be ordered, the petitioner shall also have prepared, and shall furnish to the board, a notice which shall be substantially in the form set out above, to each nonconsenting real party in interest whose address is known, together with addressed and stamped envelopes, and the board shall mail each notice by certified mail, return receipt requested, sufficiently distant in time to allow thirty (30) days to elapse between the date of the mailing of said notice and the date of the regular meeting of the board at which said petition will be the first scheduled to be heard.

(f) Petitioner shall also advance to the board at the time of the filing of said petition the cost of publication and mailing of notices as set out above which shall be established by the board. Said costs of publication and mailing of notices shall be considered as part of the costs of operation which are chargeable to the nonconsenting owner's nonconsenting share of production as set forth in paragraph (g) of this subsection (2).

(g) In the event a pooling order is issued by the board, and any nonconsenting owner does not subsequently agree in writing as provided for herein, and if the operations on the existing or proposed well which are described in the pooling order are actually commenced within one (1) year after the pooling order is issued by the board, and thereafter with due diligence and without undue delay, the existing or proposed well is actually completed as a well capable of producing oil, gas and/or other minerals in quantities sufficient to yield a return in excess of monthly operating costs, then, subject to the limitations set out in this section, the operator and/or the appropriate consenting owners shall be entitled to receive as alternate charges (alternate to and in lieu of the charges provided for in subsection (1)(b) of this section; provided, however, that in no event shall the operator and/or the appropriate consenting owners be entitled to recover less than such charges provided in subsection (1)(b) of this section) the share of production from the well attributable to the nonconsenting owner's nonconsenting interests in the unit established or subsequently reformed for production therefrom, until the point in time when the proceeds from the sale of such share, calculated at the well, or the market value thereof if such share is not sold, after deducting production and excise taxes, which operator will pay or cause to be paid, and the payment required by this paragraph (g) shall equal the sum of:

**ALTERNATE  
CHARGES  
INTEGRATION  
PENALTIES**



**ALTERNATE  
CHARGES  
INTEGRATION  
PENALTIES**

- (i) One hundred percent (100%) of the nonconsenting owner's nonconsenting share of the cost of any newly acquired surface equipment beyond the wellhead connections including, but not limited to, stock tanks, separators, treaters, pumping equipment and piping; and
- (ii) Two hundred fifty percent (250%) of that portion of the costs and expenses of operations provided for in the pooling order, and two hundred fifty percent (250%) of that portion of the cost of newly acquired equipment in the well, including wellhead connections, which would have been chargeable to the nonconsenting owner's nonconsenting share thereof; provided, however, when a mineral interest that is severed from the surface estate is owned by a nonconsenting owner or when a mineral interest is subject to an oil and gas lease that is owned by a nonconsenting owner, the payment under this subparagraph (ii) shall be three hundred percent (300%); and
- (iii) One hundred percent (100%) of the nonconsenting owner's nonconsenting share of the cost of operation of the well commencing with first production and continuing to such point in time.

Whenever a drilling unit established by a pooling order issued by the board under subsection (2) of this section is to be reformed or altered by the board for good cause, after notice and hearing, then the interest of any nonconsenting owner listed in the pooling order who received notice of the application to reform or alter the unit and had not agreed in writing as provided for herein shall remain subject to the charges set forth in this subsection (2)(g) with respect to its interest in the reformed or altered unit. If there is any nonconsenting owner within a proposed reformed or altered unit who has not been previously provided the information and offers set forth in subparagraphs (ii) through (v) of subsection (2)(a) of this section which was sent to the owners, and if the applicant for an order of reformation or alteration of such unit provides to the nonconsenting owner the information and offers set forth in subparagraphs (ii) through (v) of subsection (2)(a) of this section at the same time and in the same manner as such nonconsenting owners receive notice of the application to reform or alter the drilling unit, then the interest

of any nonconsenting owner listed in the pooling order for the reformed or altered unit who does not agree in writing as provided for herein shall be subject to the charges set forth in this subsection (2)(g) with respect to its interest in the reformed or altered unit.

Whenever any one (1) operator has filed for alternate charges on two (2) drilling units, which units are direct, partially direct or diagonal offsets one to the other, such operator may not file a petition for alternate charges, as distinguished from the charges provided by subsection (1)(b), as to any additional units which are direct, partially direct or diagonal offsets to the said first two (2) units of that operator until said operator has drilled, tested and completed the first two (2) such wells, as wells capable of production or completed as dry holes or either, and has filed completion reports on said first two (2) wells with the board, or the permits for such well or wells have expired if one or both of them be not drilled.

The pooling order, if issued, shall provide that each nonconsenting owner shall be afforded the opportunity to participate in the development and operation of the well in the pooled unit as to all or any part of said owner's interest on the same cost basis as the consenting owners by agreeing in writing to pay that part of the costs of such development and operation chargeable to said nonconsenting owner's interest, or to enter into such other written agreement with the operator as the parties may contract, provided such acceptance in writing is filed with the board within twenty (20) days after the pooling order is filed for record with the board.

The pooling order shall provide that the well be drilled on a competitive contract, arm's length basis; provided, however, that the operator may employ its own tools or those of affiliates, but charges therefor shall not exceed the prevailing rates in the area.

(h) Within sixty (60) days after the completion of any operation on which alternate charges have been ordered, the operator shall furnish any nonconsenting owner who may request same an inventory of the equipment in and connected to the well, and an itemized statement of the cost of drilling, deepening, plugging back, testing, completing and equipping the well for production; or, at its option, the operator, in lieu of an itemized statement of such costs of operation, may submit detailed monthly statements of said costs. Each month thereafter, during the time the operator and/or consenting parties are being reimbursed, the operator shall furnish any nonconsenting owner who may request same with an itemized

statement of all costs and liabilities incurred in the operation of the well, together with a statement of the quantity of oil and gas produced from it and the amount of proceeds realized from the sale of the well's production during the preceding month. Any amount realized from the sale or other disposition of equipment acquired in connection with any such operation which would have been owned by a nonconsenting owner had it participated therein as to its nonconsenting interest shall be credited against the total unreturned costs of the work done and of the equipment purchased in determining when the interest of such nonconsenting owner shall be owned by said nonconsenting owner as above provided; and if there is a credit balance, it shall be paid to such nonconsenting owner. From the point in time provided for in paragraph (g) of this subsection (2), each nonconsenting owner shall own the same interest in such well, the material and equipment in or pertaining thereto, and the production therefrom as such nonconsenting owner would have been entitled to had it participated in the drilling, reworking, deepening and/or plugging back of said well. Thereafter, except as otherwise provided in this section, the operator shall be entitled to charge each nonconsenting owner such nonconsenting owner's proportionate part of all reasonable costs incurred by the operator in operating the unit well and the unit, including a reasonable charge for supervision, and in the event such nonconsenting owner fails to pay such proportionate share of such costs within thirty (30) days after receipt by the nonconsenting owner of a valid invoice, the operator shall be entitled to receive such nonconsenting owner's share of production until such time as such unpaid share of costs shall have been recovered by the operator.

(i) In the event that a leased interest is subject to an order of pooling and integration, and the operator and/or the appropriate consenting owners are entitled to alternate charges as provided by paragraph (g) this subsection (2), and if there be no reasonable question as to good and merchantable title to the royalty interest, the lessor of said lease shall be paid, by the operator or purchaser of production, the proceeds attributable to said lessor's contracted royalty, not to exceed an amount of three sixteenths (3/16) of the proceeds attributable to the nonconsenting owner's proportionate share of production. Nothing herein contained shall affect or diminish in any way the responsibility of the

**IF  
LEASED  
3/16 NET**

nonconsenting owner to account for the payment of any royalty or other payment, not paid as herein provided, which may burden or be attributable to the interest owned by such nonconsenting owner.

(3) When production of oil or gas is not secured in paying quantities as a result of such integration or pooling of interests, there shall be no charge payable by the nonconsenting owner or owners as to such owner's nonconsenting interest.

(4) In the event of any dispute relative to costs, the board shall determine the proper costs, after due notice to all interested parties and a hearing thereon. Appeals may be taken from such determination as from any other order of the board.

(5) The State Oil and Gas Board shall in all instances where a unit has been formed out of lands or areas of more than one (1) ownership, require the operator when so requested by an owner, to deliver to such owner or his assigns his proportionate share of the production from the well common to such drilling unit; but where necessary, such owner receiving same shall provide at his own expense proper receptacles for the receipt or storage of such oil, gas or distillate.

(6) Should the persons owning the drilling or other rights in separate tracts embraced within a drilling unit fail to agree upon the integration of the tracts and the drilling of a well on the unit, and should it be established that the board is without authority to require integration as provided in this section, then, subject to all other applicable provisions of this chapter, and of Chapter 1 of this title, the owner of each tract embraced within the drilling unit may drill on his tract; but the allowable production from such tract shall be such proportion of the allowable production for the full drilling unit as the area of such separately owned tract bears to the full drilling unit.

(7) The State Oil and Gas Board, in order to prevent waste and avoid the drilling of unnecessary wells, may permit (1) the cycling of gas in any pool or portion thereof or (2) the introduction of gas or other substance into an oil or gas reservoir for the purpose of repressuring such reservoir, maintaining pressure or carrying on secondary recovery operations. The board shall permit the pooling or integration of separate tracts or separately owned interests when reasonably necessary in connection with such operations.

(8) Agreements made in the interest of conservation of oil or gas, or both, or for the prevention of waste, between and among owners or operators, or both, owning separate holdings in the same field or pool, or in any area that appears from geologic or other data to be underlaid by a common accumulation of oil or gas, or both, and agreements between and among such owners or operators, or both, and royalty owners therein, for the purpose of bringing about the development and operation of the field, pool or area, or any part thereof, as a unit, and for establishing and carrying out a plan for the cooperative development and operation thereof, when such agreements are approved by the board, are hereby authorized and shall not be held or construed to violate any of the statutes of this state relating to trusts, monopolies, or contracts and combinations in restraint of trade.

This act shall not affect any drilling units formed prior to the effective date of this act under Section 53 3 7, Mississippi Code of 1972, as previously written, and this act shall not abrogate or amend any contracts in existence prior to the effective date of this act.

This act shall take effect and be in force from and after July 1, 2014

SOURCES: Codes, 1942, § 6132- 22; Laws, 1948, Ch. 256, § 10; 1950, Ch. 220, § 3.

# LA 30:10 Risk Fee Assessment

<http://legis.la.gov/lss/lss.asp?folder=104>



- RS 30:9      Production from pool; drilling units; equitable share; rules and regulations
- RS 30:9.1    Termination of units; conditions; procedure; issuance of orders
- RS 30:10     Agreements for drilling units; pooling interests; terms and conditions; expenses
- RS 30:10.1   Authority of governor with advice of the commissioner of conservation to enter unitization agreements affecting the production from state and federal waterbottoms
- RS 30:11     Allocation of allowable production
- RS 30:11.1   Filing and recording of orders creating drilling or production units
- RS 30:12     Court review and injunction; venue; procedure; burden of proof
- RS 30:13     Temporary restraining order or injunction; notice and hearing; bond

§10. Agreements for drilling units; pooling interests; terms and conditions; expenses

A. When two or more separately owned tracts of land are embraced within a drilling unit which has been established by the commissioner as provided in R.S. 30:9(B), the owners may validly agree by separate contract to pool, drill, and produce their interests and to develop their lands as a drilling unit.

(1) Where the owners have not agreed by separate contract to pool, drill, and produce their interests, the commissioner shall require them to do so and to develop their lands as a drilling unit, if he finds it to be necessary to prevent waste or to avoid drilling unnecessary wells.

(a) All orders requiring pooling shall be made after notice and hearing. They shall be upon terms and conditions that are just and reasonable and that will afford the owner of each tract the opportunity to recover or receive his just and equitable share of the oil and gas in the pool without unnecessary expense. They shall prevent or minimize reasonable avoidable drainage from each developed tract which is not equalized by counter drainage.

(b) The portion of the production allocated to the owner of each tract included in a drilling unit formed by a pooling order shall, when produced be considered as if it had been produced from his tract by a well drilled thereon.

(2) In the event a drilling unit is formed by a pooling order by the commissioner and absent any agreement or contract between owners as provided in this Section, then the cost of development and operation of the pooled unit chargeable to the owners therein shall be determined and recovered as provided herein.

(a)(i) Any owner drilling or intending to drill a unit well, a substitute unit well, an alternate unit well, or a cross-unit well on any drilling unit heretofore or hereafter created by the commissioner, may, by registered mail, return receipt requested, or other form of guaranteed delivery and notification method, not including electronic communication or mail, notify all other owners in the unit prior to the actual spudding of any such well of the drilling or the intent to drill and give each owner an opportunity to elect to participate in the risk and expense of such well. Such notice shall contain:

(aa) An authorization for expenditure form (AFE), which shall include a detailed estimate of the cost of drilling, testing, completing, and equipping such proposed well. The AFE shall be dated within one hundred twenty days of the date of the mailing of the notice;

(bb) The proposed location of the well;

(cc) The proposed objective depth of the well;

(dd) An estimate of ownership as a percentage of expected unit size or approximate percentage of well participation;

(ee) In the event that the proposed well is being drilled or drilled at the time of the notice, then a copy of all available logs, core analysis, production data, and well test data from the well which has not been made public.

(ii) An election to participate must be exercised by mailing written notice thereof by registered mail, return receipt requested, or other form of guaranteed delivery and notification method, not including electronic communication or mail, to the owner drilling or intending to drill the proposed well within thirty days after receipt of the initial notice. Failure to give timely written notice of the election to participate shall be deemed to be an election not to participate and the owner shall be deemed a nonparticipating owner.

(iii) If the drilling of the proposed well is not commenced in accordance with the initial notice within ninety days after receipt of the initial notice, then the drilling owner shall send a supplemental notice in order for the provisions of this Subsection to apply.

(b)(i) Should a notified owner elect not to participate in the risk and expense of the unit well, substitute unit well, alternate unit well, or cross-unit well or should such owner elect to participate in the risk and expense of the proposed well but then fail to pay his share of the drilling costs determined by the AFE within sixty days of the spudding of the well or fail to pay his share of subsequent drilling,

completion, and operating expenses within sixty days of receipt of subsequent detailed invoices, then such owner shall be deemed a nonparticipating owner, and the drilling owner shall, in addition to any other available legal remedies to enforce collection of such expenses, be entitled to own and recover out of production from such well allocable to the tract under lease to the nonparticipating owner such tract's allocated share of the actual reasonable expenditures incurred in drilling, testing, completing, equipping, and operating the well, including a charge for supervision, together with a risk charge. The risk charge for a unit well, substitute unit well, or cross-unit well that will serve as the unit well or substitute well for the unit shall be two hundred percent of such tract's allocated share of the cost of drilling, testing, and completing the well, exclusive of amounts the drilling owner remits to the nonparticipating owner for the benefit of the nonparticipating owner's royalty and overriding royalty owner. The risk charge for an alternate unit well or cross-unit well that will serve as an alternate unit well for the unit shall be one hundred percent of such tract's allocated share of the cost of drilling, testing, and completing such well, exclusive of amounts the drilling owner remits to the nonparticipating owner for the benefit of the nonparticipating owner's royalty and overriding royalty owner.

(ii)(aa) During the recovery of the actual reasonable expenditures incurred in drilling, testing, completing, equipping, and operating the well, the charge for supervision, and the risk charge, the nonparticipating owner shall be entitled to receive from the drilling owner for the benefit of his lessor royalty owner that portion of production due to the lessor royalty owner under the terms of the contract or agreement creating the royalty between the royalty owner and the nonparticipating owner reflected of record at the time of the well proposal.

(bb) In addition, during the recovery set forth in Subitem (aa) of this Item, the nonparticipating owner shall receive from the drilling owner for the benefit of the overriding royalty owner the lesser of: (I) the nonparticipating owner's total percentage of actual overriding royalty burdens associated with the existing lease or leases which cover each tract attributed to the nonparticipating owner reflected of record at the time of the well proposal; or (II) the difference between the weighted average percentage of the total actual royalty and overriding royalty burdens of the drilling owner's leasehold within the unit and the nonparticipating owner's actual leasehold royalty burdens reflected of record at the time of the well proposal.

(cc) The share that is to be received by the nonparticipating owner on behalf of its lessor royalty owner and overriding royalty owner shall be reported by the drilling owner in accordance with Part 2-B of Chapter 13 of Title 31 of the Louisiana Revised Statutes of 1950.

(dd) Nothing in this Section shall relieve any lessee of its obligations to pay, from the commencement of production, any lessor royalty and overriding royalty due under the terms of his lease, and other agreements during the recovery of actual well costs and the risk charge, or shall relieve any lessee of his obligation to pay all royalty and overriding royalty due under the terms of his lease and other agreements after the recovery of the actual well costs and the risk charge. Except as provided in this Paragraph, the drilling owner's obligation to pay the royalty and the overriding royalty to the nonparticipating owner in no way creates an obligation, duty, or relationship between the drilling owner and any person to whom the nonparticipating owner is liable to, contractually or otherwise.

(ee) In the event of nonpayment by the nonparticipating owner of the royalty and overriding royalty due, the lessor royalty owner and overriding royalty owner shall provide written notice of such failure to the nonparticipating owner and drilling owner as a prerequisite to a judicial demand for damages. The lessor royalty owner and overriding royalty owner shall follow the same procedure and have the same remedies provided in Part 6 of Chapter 7 of Title 31 of the Louisiana Revised Statutes of 1950 or Part 2-A of Chapter 13 of Title 31 of the Louisiana Revised Statutes of 1950, respectively, against the nonparticipating owner and the drilling owner. If the drilling owner provides sufficient proof of payment of the royalties to the nonparticipating owner, then the lessor royalty owner and overriding royalty owner shall have no cause of action against the drilling owner for nonpayment.

(ff) In the event of nonpayment by the drilling owner of the royalty and overriding royalty due to the nonparticipating owner for the benefit of the lessor royalty owner and overriding royalty owner, and payment by the nonparticipating owner of the royalty and overriding royalty due, the nonparticipating owner shall provide written notice of such failure to pay to the drilling owner as a prerequisite to a judicial demand for damages. The drilling owner shall have thirty days after receipt of the required notice within which to pay the royalties due or to respond in writing by stating a reasonable cause for nonpayment. If the drilling owner fails to make payment of the royalties or fails to state a reasonable cause for nonpayment within this period, the court may award to the nonparticipating owner as damages double the amount of royalties due, interest on that sum from the date due, and a reasonable attorney fee regardless of the cause for the original failure to pay royalties. If the drilling owner provides sufficient proof of payment of the royalties to the nonparticipating owner, then the nonparticipating owner shall have no cause of action against the drilling owner for nonpayment.

(iii) Any owner not notified shall bear only his tract's allocated share of the actual reasonable expenditures incurred in drilling, testing, completing, equipping, and operating the unit well, including a charge for supervision, which share shall be subject to the same obligation and remedies and rights to own and recover out of production in favor of the drilling party or parties as provided in this Subsection. A participating owner shall deliver to the owner whom has not been notified the proceeds attributable to his royalty and overriding royalty burdens as described in this Section.

(c) Should a drilling unit be created by order of the commissioner around a well already drilled or drilling and including one or more tracts as to which the owner or owners thereof had not participated in the risk and expense of drilling such well, then within sixty days of the date of the order creating such unit the provisions of this Subsection for notice, election, and participation shall be applicable as if a well were being proposed by the owner who drilled or was drilling such well; however, the cost of drilling, testing, completing, equipping, and operating the well allocable to each tract included in the unit shall be reduced in the same proportion as the recoverable reserves in the unitized pool have been recovered by prior production, if any, in which said tract or tracts did not participate prior to determining the share of cost allocable to such tract or tracts.

(d)(i) Should a drilling unit be revised by order of the commissioner so as to include an additional tract or tracts, then within sixty days of the date of the order revising such unit the provisions of this Subsection for notice, election, and participation shall be applicable to such added tract or tracts and the owner thereof as if a well were being proposed by the owner who had drilled the well; however, the cost of drilling, testing, completing, equipping, and operating the unit well shall be reduced in the same proportion as the recoverable reserves in the unitized pool have been recovered by prior production, if any, in which said tract or tracts did not participate prior to determining the share of cost allocable to the subsequently included tract or tracts.

(ii) Should a drilling unit be revised by order of the commissioner as to exclude a tract or tracts, the cost of drilling, testing, completing, equipping, and operating the unit well shall be reduced in the same proportion as the recoverable reserves in the unitized pool have been recovered by prior production to determine the share of cost allocable to the subsequently excluded tract or tracts.

(e)(i) The provisions of Subparagraph (b) of this Paragraph with respect to the risk charge shall not apply to any unleased interest not subject to an oil, gas, and mineral lease.

(ii) Notwithstanding the provisions of Subparagraph (b) of this Paragraph, the royalty owner and overriding royalty owner shall receive that portion of production due to them under the terms of the contract creating the royalty.

(f) In the event of a dispute relative to the calculation of unit well costs or depreciated unit well costs, the commissioner shall determine the proper costs after notice to all interested owners and a public hearing thereon.

(g) Nothing contained herein shall have the effect of enlarging, displacing, varying, altering, or

in any way whatsoever modifying or changing the rights and obligations of the parties thereto under any contract between or among owners having a tract or tracts in the unit.

(h) The owners in the unit to whom the notice provided for hereinabove may be sent, are the owners of record as of the date on which the notice is sent.

(3) If there is included in any unit created by the commissioner of conservation one or more unleased interests for which the party or parties entitled to market production therefrom have not made arrangements to separately dispose of the share of such production attributable to such tract, and the unit operator proceeds with the sale of unit production, then the unit operator shall pay to such party or parties such tract's pro rata share of the proceeds of the sale of production within one hundred eighty days of such sale.

B. Should the owners of separate tracts embraced within a drilling unit fail to agree upon the pooling of the tracts and the drilling of a well on the unit, and should it be established by final and unappealable judgment of court that the commissioner is without authority to require pooling as provided for in Subsection A, then, subject to all other applicable provisions of this Chapter, the owner of each tract embraced within the drilling unit may drill thereon. The allowable production therefrom shall be such proportion of the allowable for the full unit as the area of the separately owned tract bears to the full drilling unit.

Acts 1984, No. 345, §1 and §2, eff. Jan. 1, 1985; Acts 1991, No. 595, §1; Acts 2008, No. 115, §1; Acts 2012, No. 743, §1.

# Monetizing Minerals – The Seller

## What Can you Sell or Lease?



- *Mississippi vs. Louisiana* – Differences in Leasing, Effects of Liberative Prescription in LA vs. Perpetual Mineral Reservations in MS, Force Pooling MS 53-3-7 vs. Risk Fee Statute LA 30:10
- *Lease your Minerals* – Lease Form (Delay Rental (LA) or Paid Up (LA or MS), Bonus, Rentals (LA), Royalty, Responsibility of paying difference between granted royalty and forced pooling royalty (LA vs. MS), Primary Term, Extensions, Pugh Clause, Lease Operations, Unit Operations, Surface Restrictions, Severed v. Non-Severed, Forced Pooling, etc .
- *Sell your Minerals* – Offers range based on PDP/PUD vs. Potential or Possible, leased/unleased, location, fairway vs. 5 ohm resistivity line, unitized or not, drilling or not, likelihood of drilling in near future, likelihood of success, economics/return on investment proven economic vs. still being proven
- *Sell your Royalty* – Same considerations as Minerals except Grantor retains the right to receive bonus and rental payments on future leases. Basically, mineral acres are worth more than royalty acres (see infra for Conversion from Mineral Acres to Royalty Acres)

# LA 31:75 – Mineral Code

<http://www.legis.state.la.us/lss/lss.asp?folder=105>



## Mineral code

|          |  |
|----------|--|
| RS 31:72 | Conventional alteration of the   |
| RS 31:73 | Single servitude may not exist on noncontiguous tracts   |
| RS 31:74 | Right to fix term or shorten prescriptive period; effect of stipulation for prescriptive period greater than ten years |
| RS 31:75 | Right to contract regarding rules of use   |
| RS 31:76 | Transactions involving outstanding   |
| RS 31:77 | Application of after-acquired title doctrine   |
| RS 31:78 | Prescription when after-acquired title doctrine applies; acquisition of outstanding servitude                          |
| RS 31:79 | Prescription when after-acquired title doctrine applies; extinction of outstanding servitude                           |
| RS 31:80 | The mineral royalty  |

# **Louisiana Mineral Code Article 31:75 – Unit operations interrupting entirety of mineral servitude**



- §75. Right to contract regarding rules of use
- The rules of use regarding interruption of prescription on a mineral servitude may be restricted by agreement but may not be made less burdensome, except that parties may agree expressly and in writing, either in the act creating a servitude or otherwise, that an interruption of prescription resulting from unit operations or production shall extend to the entirety of the tract burdened by the servitude tract regardless of the location of the well or of whether all or only part of the tract is included in the unit.
- Acts 1974, No. 50, §75, eff. Jan. 1, 1975.

# Monetizing Minerals

## Reasons for Monetizing



- *Personal Reasons* – Age, Medical Needs, Funding tuitions of grandchildren, Gifts to children, etc.
- *Need for Money* – Quick Cash – Favorable Tax Consideration-Long Term Capital Gain vs. Ordinary Income Tax Rate
- *Risk of No Well* – Even though your property is unitized or near a unit, no guarantee a well will be drilled
- *Well too far into the Future* – No guarantee a well will be drilled in your life time. Less risk than the unit being fully developed but still a risk. Time value of the dollar and risk to be assessed here.
- *Well with Problems* – Several wells in the TMS have had mechanical issues either requiring premature abandonment or significant reduction in productive ability (partial lateral completions, junk/fish in hole)
- *Asset Diversification* – All your eggs in the Real Estate Basket. Another way of providing diversification

# Monetizing Minerals – Things to Consider



- *Figure Out What You Own* – Location of your Tract, If an irregular description, maps and legal descriptions, Minerals and/or Surface, All or a Part, Mineral Interest on Each of your Tracts, Royalty ownership, if different/severed, Other owners with names/addresses
- *Know your Title* – If you have title issues, get them cured ahead of time to save the buying party time and money and to improve your chances of a successful transaction.
- *Evaluate your own Minerals* – Perform a lease check of the other tracts in the unit, or if the area is non-unitized, the area around your tract. Scout your area by talking to your neighbors and check out the mineral history of your area, the locations of wells both plugged and abandoned and producing.
- *Evaluate your Offer* – All unsolicited mail offers are not bad. Some can be very competitive and submitted by reputable companies whose word is their bond. Beware of offers that are not based on a per mineral or royalty acre basis and that “bully” the offeree into making a “snap” decision. If possible, have a qualified, experienced landman or oil and gas attorney advise you.
- *Consider Selling Half or a Portion of your Minerals* – A bird in the hand may be worth two in the bush. Having your cake and eating it too.
- *Be Careful What you Are Signing/Value of Advice* – If you are not completely comfortable with the deed you are provided, have a qualified, experienced landman or oil and gas attorney advise you. Perhaps, preferably, the landman, since he will probably be more experienced in the oil and gas leasing business and considerably less expensive than an attorney on an hourly cost basis.

# Monetizing Minerals

## The Pre -Selling Process – Proper Packaging



- Importance of Packaging - Know thy Property – Expedites sale, improves offers, minimizes closing fees
- Tract Gross and Net Mineral Acres
- Tract Location – Tax Assessor Description, Legal Description, Lease Description, Maps/Surveys
- Copies of all recorded leases burdening the tracts to be sold – not just Memoranda – Get from courthouse or from Lessee – Establish a rapport with your lessee or its representative landman and the company landman and Division Order Analyst
- Copies of Division Orders and Check Stubs and Payment History – Division Orders (LA vs. MS) – in LA, don't sign, MS, verify before signing (see copy)

**DIVISION ORDER**

To: **Encana Oil & Gas (USA) Inc.**  
**370 17th Street, Suite 1700**  
**Denver, Colorado 80202**

Date: 9/22/2014  
 Effective Date: 5/1/2014 and 9/1/2014

Property Number: 73117 and 73118  
 Property Name: Pintard 28H-1 and Pintard 28H-2  
 Operator: Encana Oil & Gas (USA) Inc.  
 County and State: Wilkinson, Mississippi  
 Property Description: See Attached Plat for Unit Description

RI Royalty Interest  
 OR Overriding Royalty Interest  
 WI Working Interest

Production:  Oil  Gas  Other\_\_

| OWNER NAME         | OWNER NO. | INTEREST  |
|--------------------|-----------|---|
| Arpent Energy, LLC | 2238452   | .002888920 RI<br>(.1111111111 mineral interest x .2 RI less .00138889<br>NPRI burden x 270.07 tract 25-02 acres / 1947.601 unit<br>acres) |

The undersigned certifies the ownership of the decimal interest in production or proceeds as described above payable by **Encana Oil & Gas (USA) Inc. (Encana)**.

Encana shall be notified, in writing, of any change in ownership, decimal interest, or payment address. All such changes shall be effective the first day of the month following receipt of such change.

Encana is authorized to withhold payment pending resolution of a title dispute or adverse claim asserted regarding the interest in production claimed herein by the undersigned. The undersigned agrees to indemnify and reimburse Encana any amount attributable to an interest to which the undersigned is not entitled.

Encana may accrue proceeds until the total amount equals **\$25.00**, or pay **annually**, whichever occurs first, or as required by applicable state statute.

This Division Order does not amend any lease or operating agreement between the undersigned and the lessee or operator or any other contracts for the purchase of oil or gas.

In addition to the terms and conditions of this Division Order, the undersigned and Encana may have certain statutory rights under the laws of the state in which the property is located.

Owner Signature:   
 Owner Tax I.D. Number: \_\_\_\_\_  
 Owner Address: \_\_\_\_\_  
 Owner Daytime Telephone #/ Owner Fax Telephone #: \_\_\_\_\_

*Federal Law requires you to furnish your Social Security or Taxpayer Identification Number. Failure to comply will result in 28% tax withholding and will not be refundable by Payor.*

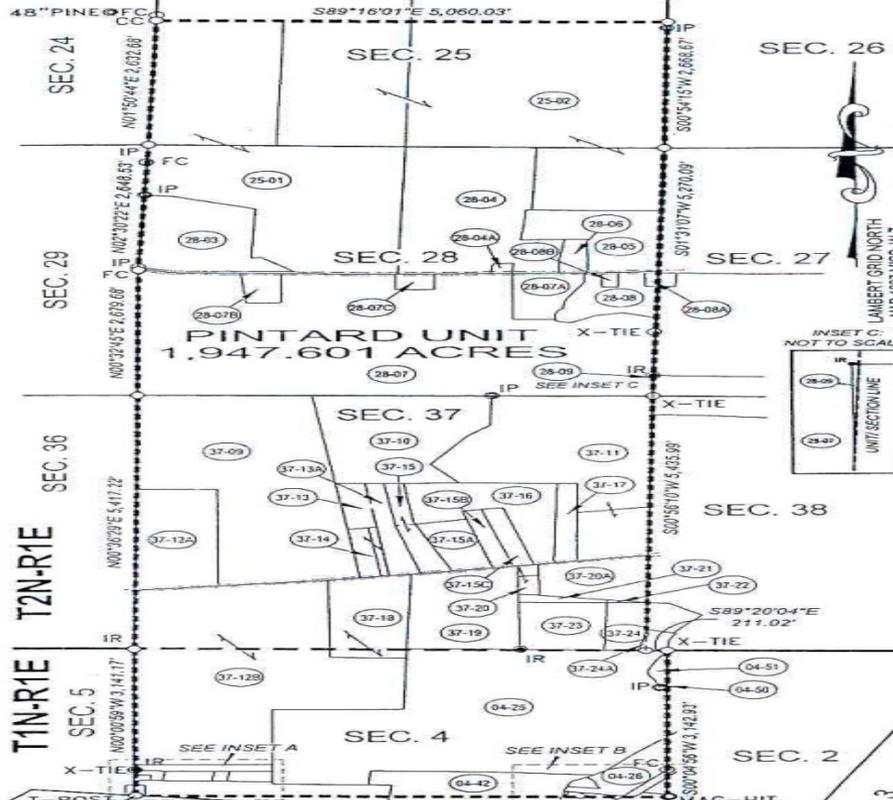
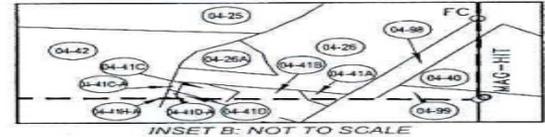
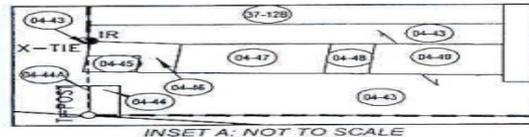
# PINTARD UNIT

| TRACT    | PARTICIPANT                               | ACREAGE  | PERCENT   |
|----------|---|----------|-----------|
| 04-25    | J&N Timber, Inc.                          | 194.838  | 10.00400  |
| 04-26    | Wilkinson County Board of Education       | 11.933   | 0.61270   |
| 04-26A   | Ricky Jackson                             | 1.079    | 0.05540   |
| 04-40    | Thomas Kennedy, et al                     | 1.021    | 0.05242   |
| 04-41A   | Milie Washington, et al                   | 0.125    | 0.00642   |
| 04-41B   | Odell Franklin, et ux                     | 0.394    | 0.02023   |
| 04-41C   | Walker Bradley, et ux                     | 0.364    | 0.01889   |
| 04-41C-A | Walker Bradley, et ux                     | 0.064    | 0.00329   |
| 04-41D   | Laura & Ernestine McCray Est.             | 0.037    | 0.00190   |
| 04-41D-A | Laura & Ernestine McCray Est.             | 0.041    | 0.00211   |
| 04-41H-A | Emanuel Rakciff                           | 0.001    | 0.00005   |
| 04-42    | Gayden Morrill, et al                     | 23.305   | 1.19660   |
| 04-43    | Emerson B. Robinson, Jr.                  | 20.926   | 1.07444   |
| 04-44    | Jason Clark                               | 0.520    | 0.02670   |
| 04-44A   | Johnny Clark                              | 0.010    | 0.00051   |
| 04-45    | Elvis Haynes                              | 0.436    | 0.02239   |
| 04-46    | Debra G. Jones                            | 0.994    | 0.05104   |
| 04-47    | Jerry B. Hill                             | 2.388    | 0.12251   |
| 04-48    | Jerry B. Hill                             | 0.739    | 0.03794   |
| 04-49    | Marzelle B. Tolar, et al                  | 2.192    | 0.11255   |
| 04-50    | William E. Hughes & Curtis E. Hughes, Sr. | 0.088    | 0.00349   |
| 04-51    | Clyde Edward Brown, et ux                 | 2.061    | 0.10582   |
| 04-98    | Illinois Central Gulf Railroad            | 1.453    | 0.07460   |
| 04-99    | No Ownership Information                  | 0.557    | 0.02860   |
| 25-01    | Melba L. Harvey, Sr. Trust                | 195.769  | 10.05180  |
| 25-02    | Brent McCasine Anders                     | 270.070  | 13.86680  |
| 25-03    | Ann A. Hetherville                        | 39.887   | 2.04801   |
| 28-04    | Percy Turner                              | 82.570   | 4.23958   |
| 28-04A   | D.Z. Hughes, et ux                        | 0.986    | 0.05063   |
| 28-05    | Percy Turner (or assigns)                 | 30.459   | 1.56392   |
| 28-06    | Cemetery                                  | 4.206    | 0.21668   |
| 28-07    | M.L. Harvey                               | 268.940  | 13.80878  |
| 28-07A   | Patrick N. Conerty, et ux                 | 12.909   | 0.66282   |
| 28-07B   | William D. Dickey, et ux                  | 5.406    | 0.27757   |
| 28-07C   | Roy R. McKey, et ux                       | 3.004    | 0.15424   |
| 28-08    | Jack R. Darden, et ux                     | 16.635   | 0.85413   |
| 28-08A   | Jewel Jack Darden, et ux                  | 0.621    | 0.0415    |
| 28-08B   | Jack R. Darden, et ux                     | 1.006    | 0.05165   |
| 28-09    | Estate of Horace McNeil                   | 0.008    | 0.00041   |
| 37-09    | T.K. Curse                                | 145.034  | 7.44680   |
| 37-10    | Robert M. McGehee                         | 60.799   | 3.12174   |
| 37-11    | Offie T. VanNorman                        | 104.283  | 5.35443   |
| 37-12A   | Myrtle Haynes                             | 39.794   | 2.04323   |
| 37-12B   | Red Archer                                | 173.986  | 8.93325   |
| 37-13    | Donnie Nutt                               | 6.470    | 0.33220   |
| 37-13A   | Ernest Dickey, et ux                      | 10.031   | 0.51504   |
| 37-14    | Dolly Robinson, et al                     | 7.046    | 0.36178   |
| 37-15    | Elis Rogelio, Jr., et ux                  | 10.179   | 0.52218   |
| 37-15A   | William Martin, et ux                     | 11.284   | 0.57938   |
| 37-15B   | James Jelks, et ux                        | 5.722    | 0.29380   |
| 37-15C   | Feliciana Bank & Trust                    | 6.074    | 0.31187   |
| 37-16    | Dolly Robinson, et al                     | 32.018   | 1.64387   |
| 37-17    | Edward Gross, Jr.                         | 8.360    | 0.42925   |
| 37-18    | Martin A. Reid                            | 31.098   | 1.59673   |
| 37-19    | James F. Harvey                           | 41.855   | 2.14911   |
| 37-20    | Mildred Field                             | 6.995    | 0.35327   |
| 37-20A   | Molly Field Stout, et al                  | 20.369   | 1.04688   |
| 37-21    | Bernard Bagley                            | 2.376    | 0.12200   |
| 37-22    | Bernard Bagley                            | 0.358    | 0.01838   |
| 37-23    | Stephen A. Smith, Jr.                     | 19.874   | 1.02044   |
| 37-24    | Bernard J. Bagley                         | 8.999    | 0.46206   |
| 37-24A   | Bernard J. Bagley                         | 0.303    | 0.01558   |
| TOTALS   |   | 1947.601 | 100.00000 |

(04-08) DESIGNATES TRACT NUMBER.

P.O.B. UNIT BOUNDARY  
 X= 262,384.05' (27)  
 Y= 210,760.44'  
 Lat= 31°04'38.131"N  
 Lon= 91°05'32.325"W  
 X= 2,058,937.69' (83)  
 Y= 574,504.04'

- IR FOUND IRON ROD
- FC FENCE CORNER
- X-TIE FOUND CROSS TIE
- IP FOUND IRON PIPE
- CC CALCULATED CORNER
- T-POST FOUND T-POST
- MAG-HIT FOUND MAGNETIC ANOMALY



**encana**

Encana Oil & Gas (USA) Inc.  
 5851 Legacy Circle  
 Plano, Texas 75024

**PINTARD UNIT**  
 SECTIONS 25, 28 & 37, T2N-R1E  
 SECTION 4, T1N-R1E  
 WILKINSON COUNTY, MISSISSIPPI



APRIL 25, 2014  
 REV: MAY 5, 2014

*Brandon C. Herpin*  
 BRANDON C. HERPIN  
 PROFESSIONAL LAND SURVEYOR  
 MISSISSIPPI REGISTRATION NO. 3257



PREPARED BY:  
**C&C Technologies**  
 SURVEY SERVICES  
 730 E. KANISSE SALDOM ROAD, LAVERGNE, LA. (337) 261-0560  
 MS. REGISTRATION NUMBER: 5-2328  
 L:\MS\TOWNRANCE-MS\MS-WASHINGTON\NMR\02N-01E-MS-WM\131107-Pintard\U131107C.DWG



| PAYEE      | PAYEE NO.  | DATE       | CHECK NUMBER | AMOUNT     |
|------------|------------|------------|--------------|------------|
| [REDACTED] | [REDACTED] | 08/25/2014 | [REDACTED]   | [REDACTED] |

| WELL#                         | WELL NAME          | STATE  | COUNTY   |             |            |            |            | OWNER      |            |          |            |              |
|-------------------------------|--------------------|--------|----------|-------------|------------|------------|------------|------------|------------|----------|------------|--------------|
| DATE                          | PC                 | INT    | PRICE    | QUANTITY    | VALUE      | DEDUCTIONS | NET        | INTEREST   | PAID INT   | VALUE    | DEDUCTIONS | NET SHARE    |
| 23111014                      | NUNNERY 12 1K 1    | MS     | AMITE    |             |            |            |            |            |            |          |            |              |
| 06/14                         | O RI               | 106.34 | 15791.65 | 1679255.64  | 22525.16   | SEV        | 1656730.48 | 0.00494322 | 0.00494322 | 8300.93  | 111.35     | SEV 8189.58  |
| 23111015                      | CH LEWIS 30 19 H 1 | MS     | AMITE    |             |            |            |            |            |            |          |            |              |
| 06/14                         | O NPR              | 106.34 | 27260.18 | 2898798.47  | 38883.83   | SEV        | 2859914.64 | 0.00612464 | 0.00612464 | 17754.10 | 238.15     | SEV 17515.95 |
|                               |                    |        |          | OWNER NET   | OWNER NET  |            |            |            |            |          |            |              |
|                               |                    |        |          | OWNER GROSS | DEDUCTIONS | TOTALS     |            |            |            |          |            |              |
| CURRENT CHECK                 |                    |        |          | 26055.03    | 349.50     | 25705.53   |            |            |            |          |            |              |
| YEAR TO DATE                  |                    |        |          | 31736.65    | 425.79     | 31310.86   |            |            |            |          |            |              |
| -----PRODUCTS/DEDUCTIONS----- |                    |        |          |             |            |            |            |            |            |          |            |              |

O - OIL / SEV - SEVERANCE TAX /

TOTAL CHECK AMOUNT 25705.53

# Louisiana Mineral Code Article 138.1 – Signing of Division Order not Required for Royalty Payments



- §138.1. Division order; precedence of lease; penalties for failure to pay royalties due
- A. For the purposes of this Article, a "division order" is an instrument setting forth the proportional ownership in oil or gas, or the value thereof, which division order is prepared after examination of title and which is executed by the owners of the production or other persons having authority to act on behalf of the owners thereof.
- B. A division order may not alter or amend the terms of the oil and gas lease. A division order that varies the terms of the oil and gas lease is invalid to the extent of the variance, and the terms of the oil and gas lease take precedence.
- C. The execution of a division order is not a condition precedent to receiving payment from a lessee. The lessee shall not withhold royalty payments because his lessor has not executed a division order.
- D. If the lessee fails to pay royalties solely because his lessor has not executed a division order as defined in this Article, the court shall award as damages double the amount of royalties due, legal interest on that sum from the date due, and reasonable attorney's fees. However, if the lessor fails to supply the name, address, and tax identification number upon written request of the lessee, the lessee's failure to pay royalties shall be deemed reasonable.
- Acts 1992, No. 1110, §1.

# Monetizing Minerals – Division Orders

## How to Calculate your Unit Decimal Interest (UDI)



- $UDI = \text{Mineral Interest} \times \text{Tract Participation Factor (your gross mineral acres divided by total unit acres)} \times \text{Lease Royalty}$
- $\text{Mineral Interest} = \text{your percentage of owned minerals in the tract, net mineral acres divided by gross mineral acres.}$
- $\text{Tract Participation Factor} = \text{Gross Mineral Acres Divided by Total Unit Acres}$
- $\text{Lease Royalty} = \text{Royalty fraction or percentage given by the lessee to you in your lease}$

# Monetizing Minerals – Division Orders

## How to Calculate your Unit Decimal Interest (UDI) (cont.)



- *Example:* Say you own 20 net mineral acres under 40 net mineral acres inside the Brown Unit, which is a triple-decker sectional unit (3 sections). Total acres in the Unit are 1,920 (3 x 640 = 1,920 acres) if the sections are perfectly regular (rare). You leased to Company X for a 1/5 (20%) royalty. What is your share of the production of unitized hydrocarbons?
- *Mineral Interest* = 20 divided by 40, or 1/2
- *Tract Participation Factor* = 40 divided by 1,920 = 0.02083
- *Lease Royalty* = 1/5 or .20
- *The Answer:* 1/2 x 0.02083 x 0.20 = 0.002083 x 1,920 x 8 = 31.99488 royalty acres (see next slide on conversion)

# Monetizing Minerals

## How to Convert Mineral Acres to Royalty Acres



- Some individuals prefer to sell royalty acres versus mineral acres.
- A *Mineral Acre* is one acre of minerals, leased or unleased. A *Royalty Acre* is equal to  $1/8$  of a one mineral acre, free of the cost of production. Royalty Acres exist to provide a fixed commodity for dealing in the sale of “royalty acres”, which, de facto, are resultant from the lease and royalty granted on the tract. If Leased, then royalty acres can be converted from Mineral Acres as follows:
- $1 \text{ mineral} \times 8 = 8 \text{ royalty acres} \times \text{the royalty } (1/6, 3/16, \text{ or } 1/5) = \text{number of royalty acres in one mineral acre.}$
- Example: You own 20 mineral acres under 40 gross acres in the Brown Unit leased for  $1/5$  royalty. How many royalty acres do you own?
- $20 \times 8 \text{ (number of royalty acres in a net mineral acre)} \times 1/5 \text{ (or } 0.20) = 32 \text{ royalty acres}$
- E.g.  $3/16$  royalty:  $20 \times 8 \text{ (number of royalty acres in a net mineral acre)} \times 3/16 = 30 \text{ royalty acres}$
- E.g.  $1/6$  royalty:  $20 \times 8 \text{ (number of royalty acres in a net mineral acre)} \times 1/5 = 26.67 \text{ royalty acres}$

# Monetizing Minerals

## The Market for Buying and What You Can Expect



- **3 Tiers of Mineral Acquisition Purchase**
- **Primary Purchasers** – Made up of companies who have a staff dedicated to evaluation and purchase of primary, ground floor investments in the play – Tricky because there are two types of Primary Purchasers:
  - Companies who are committed to the play and who intend to buy as an investment
  - Companies who are not interested in holding the asset but want to “flip” the acreage for a profit
- **Secondary Purchasers** – same two tiers here as well, except that these are companies who are buying interests from the Primary Purchasers – willing to pay more because of low overhead
- **Tertiary Purchasers** – sometimes are Secondary Purchasers – this group is the final buyer but very hard to find and negotiate with because they aren’t in the business – examples include retirement and hedge and investment funds - only established companies with established relationships can tap this market, so best to concentrate on Primary, or best Secondary.
- Emphasis should be on trying to find the best Primary Purchaser in the Play and Monetizing with It. Using the TMSHorizons Minerals Marketplace or some other reputable online or listing service is a safe way to entertain offers, with no obligation to sell unless you have posted your asking price.
- These prices are dependent on a myriad of factors: Location, Location, Location, Tier of Purchaser, Drilled or Undrilled, Operator, Size of the Unit (if Unitized), Leased or Unleased\*, Proximity to a Drilling Unit, etc.

\*When selling minerals, not being leased can be a good thing or a bad thing for the Seller and/or Purchaser. If unleased, the value of a lease bonus/rental can be monetized to some degree with the Purchaser, if in a good location. If on the fringe, and unleased, the Purchaser can take this as a sign that the industry doesn’t value the minerals enough to lease them. Your mineral agent can perform a lease check and advise you further.

# Monetizing Minerals – Ultimate Value of a RA The Market for Buying and What You Can Expect



- Value of a Royalty Acre in a TMS 3 Section (640 acre) Unit with Single Well EUR of 600,000 bbls.
- Total Value of Unit Production over Time (not risked, or discounted to Net Present Value or Compounded for reinvestment )
- 600,000 bbls. x 8 wells (2 permits and 6 density wells) x \$90 (includes severance tax) per bbl. = \$432,000,000
- Total Value of a Single Royalty Acre
- 1 royalty acre divided by (1920 x 8 = 15,360) = 0.0000651 share of total unit production
- 0.0000651 x \$432,000,000 = \$28,125, the dollars earned by a single royalty acre
- A royalty acre is equal to 1/8 of a mineral acre, free of the costs of production.
- EUR stands for Estimated Ultimate Recovery. This is the amount of hydrocarbons that the well is expected to produce over its economic life. The amount of time needed to achieve this production could vary from well to well and could easily take 20 years, or more.
- In this scenario, a stacked, 3 section unit, if the unit contains sections that are regular, the unit size will be 3 times 640 acres or 1,920 acres total. The unit application generally is accompanied by two permits, one to the north and one to the south of the middle of the unit location. Additionally, 6-8 additional wells are planned for a total of 8-10 unit wells.
- \$90 is a discounted price to the current price of \$100 per barrel to be conservative with this valuation. It takes out nearly \$10 for Mississippi State severance tax although at present each well has a waiver of severance tax until payout. Much of the productive life of the well will pay its share of severance tax and so we have included the discount from the outset. TMS oil is a very sweet crude and may be sold at a premium to the normal price of oil.
- This amount has not been discounted for net present value, or inflation, nor compounded for reimbursement value.
- 1920 x 8 is the total number of royalty acres in a standard 3 section unit. 1 royalty acre over 15,360 is that royalty acre's share of total unit production, free of the cost of production.

# Monetizing Minerals – Current Primary Market

## The Market for Buying and What You Can Expect



- *Leases - From \$250 - \$600 depending on location*
- *Minerals – Standard ranges we’ve seen - \$800 - \$3,200+ per mineral acre, location dependent*
- *Royalty - \$500 - \$2,000 per royalty acre, location dependent*
- *Secondary/Tertiary Market – Leave that to the “Flippers” and to TMShorizons.com website (preferably)*

# Monetizing Minerals – Accessing the Market

## Using the TMSHorizons Website's Minerals Marketplace



- Through a collaborative effort with [www.TMSHorizons.com](http://www.TMSHorizons.com) Website, Arpent Energy LLC will be managing the new online Minerals Marketplace. This site will seek sellers of leases, minerals, and mineral royalties and will perform the following services in exchange for typical real estate type commissions:
  - Assess the Seller's minerals and/or royalties and advise accordingly
  - Obtain a Listing Agreement for a commission percentage and a term (Listing Period)
  - Find a buyer for the assets through Private Placement or Negotiated Sales
  - Market, if necessary, the assets via the TMS Minerals Marketplace
  - Interface between Buyer and Seller, as necessary, only
  - Orchestrate Purchase and Sale or Deed Agreement, Clear Title, Escrow Funds, and Close
  - Check or Short Term Draft to Seller/Deed Preparation and Submittal to Seller for Execution

# www.arpentenergy.com

**WEBSITE CURRENTLY UNDER CONSTRUCTION**



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